# THE EXXONMOBIL-XTO MERGER: IMPACT ON U.S. ENERGY MARKETS

### **HEARING**

BEFORE THE

SUBCOMMITTEE ON ENERGY AND ENVIRONMENT OF THE

# COMMITTEE ON ENERGY AND COMMERCE HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

SECOND SESSION

JANUARY 20, 2010

Serial No. 111-91



Printed for the use of the Committee on Energy and Commerce energy commerce. house. gov

U.S. GOVERNMENT PRINTING OFFICE

76-003

WASHINGTON: 2012

For sale by the Superintendent of Documents, U.S. Government Printing Office Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800 Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

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### THE EXXONMOBIL-XTO MERGER: IMPACT ON U.S. ENERGY MARKETS

#### WEDNESDAY, JANUARY 20, 2010

House of Representatives,
Subcommittee on Energy and Environment,
Committee on Energy and Commerce,
Washington, DC.

The subcommittee met, pursuant to call, at 10:35 a.m., in Room 2123, Rayburn House Office Building, Hon. Edward J. Markey

[chairman of the subcommittee] presiding.

Present: Representatives Markey, Doyle, Inslee, Butterfield, Matsui, McNerney, Welch, Green, Capps, Gonzalez, Matheson, Barrow, Upton, Hall, Stearns, Shimkus, Shadegg, Pitts, Walden, Sullivan, Burgess, Scalise, and Barton (ex officio).

Also Present: Representative DeGette.

Staff Present: Bruce Wolpe, Senior Advisor; John Jimison, Senior Counsel; Joel Beauvais, Counsel; Jackie Cohen, Counsel; Michael Goo, Counsel; Melissa Cheatham, Professional Staff Member; Caitlin Haberman, Special Assistant; David Kohn, Press Secretary; Lindsay Vidal, Special Assistant; Mitchell Smiley, Special Assistant; Matt Eisenberg, Staff Assistant; Andrew Spring, Minority Professional Staff; Aaron Cutler, Minority Counsel; Mary Neumayr, Minority Counsel; and Garrett Golding, Minority Legislative Analyst.

# OPENING STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF MASSACHUSETTS

Mr. MARKEY. The Chair will call to order the Subcommittee on

Energy and the Environment.

A little over a decade ago, this committee gathered to review the largest industrial merger the world had ever seen. The product of that merger, ExxonMobil, is now the largest company in America, worth \$328 billion and raking in \$45 billion in annual profits.

Last month ExxonMobil announced a \$41 billion merger with XTO Energy, one of the country's largest natural gas producers and a pioneer in the production of natural gas trapped in shale rock formations and other unconventional sources. The combined entity will be, by far, the country's largest natural gas producer and largest holder of natural gas reserves.

Remember the old commercial, when E.F. Hutton talks, people listen? Well, it is no secret that I disagree with ExxonMobil on many aspects of energy policy, but when America's biggest company makes a big move in the energy sector, policymakers need to

listen and understand what that means. That is why I have called today's hearing.

This merger heralds a fundamental long-term shift in U.S. energy markets and one that deserves our close attention. Over the last decade, a small group of companies that most Americans have never heard of has been developing huge deposits of natural gas in deep shale formations across America. Long believed uneconomic to produce, these reserves are now being tapped thanks to a revolution in technology.

Using a technique called hydraulic fracturing, companies are now able to extract the natural gas that is locked within shales and other rock formations deep under the Earth's surface. This involves drilling into these formations and breaking them up by injecting a high-pressure stream of fluid composed mostly of water and sand, making extraction of the gas easier. Horizontal drilling also plays a key role in making these reserves economical to produce.

Companies like XTO are using these complex techniques to turn mile-deep shale and other rock formations into producible natural gas. XTO has been at the forefront of the shale gas boom over the past couple of years, quickly growing into one of the largest gas producers and the second largest holder of proven gas reserves in the country.

ExxonMobil is not the only big company getting into this space. Today six of the seven largest publicly traded companies in the world are oil and gas companies. With this merger and a recent joint venture agreement, all six will be significantly invested in unconventional natural gas development in the United States.

This transformation in the industry is having a major impact on the forecast for U.S. energy supplies. Last year the Potential Gas Committee, a group of academics and industry experts, increased its estimates of U.S. natural gas reserves by 35 percent over the estimate from just 2 years before. That increase was due mostly to shale gas, which now accounts for one-third of estimated U.S. reserves.

The brightening outlook for domestic natural gas supplies changes the backdrop against which we consider energy policy here in America. Natural gas will play a critical role as a bridge fuel to the future, a lower-carbon alternative to coal and oil that helps America transition from high carbon of the past to a clean energy future. An abundant domestic supply of natural gas, together with robust investment in efficiency and renewables, can help make crossing that bridge to the future faster and less costly.

Natural gas can only play this role if it is produced in a safe and sustainable way. Congress recently urged the EPA to study the potential impacts of hydraulic fracturing on drinking water sources. The results of that study will help to guide policy to ensure adequate protection of public health and the environment.

Now, with that introduction, we are here to listen and to learn what this ExxonMobil-XTO deal means for U.S. energy markets and energy policy. For decades America's energy policy has been between a rock and a hard place due to our dependence on imported oil from the Middle East, but now we are hearing that the natural gas trapped in American rock may provide us a pathway away from some of that dependence. I look forward to hearing from

our distinguished witnesses on this important subject. We thank you for being here.

Let me turn now and recognize the Ranking Member of the subcommittee, the gentleman from Michigan, Mr. Upton.

#### OPENING STATEMENT OF HON. FRED UPTON, A REPRESENTA-TIVE IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. UPTON. Well, thank you, Mr. Chairman. I also welcome our two distinguished witnesses this morning.

As you said, the topic of the hearing is the impacts of the ExxonMobil-XTO merger. I see this merger as an important step forward to protect American jobs and promote domestic energy security.

According to the Mineral Management Service, MMS, annual revenues from Federal mineral leases are one of the Federal Government's largest sources of nontax income, over \$10 billion in fiscal year 2007. The figure does not include the nearly \$100 billion in taxes paid by the industry just last year.

The oil and natural gas industry supports more than 9 million American jobs and adds more than \$1 trillion to the national economy. I hope I don't need to remind our colleagues about the state of our economy, that unemployment is still in double digits nationally and 15 percent in Michigan. We have to support private industry that will continue to invest in our economy and keep Americans working.

We are clearly at a crossroads. The policy decisions that this Congress makes will have a lasting impact on our economy and energy security. India and China's energy consumption continues to grow by more than 10 percent a year. China is gobbling up energy resources around the globe, and consumption will continue to sharply escalate as one-third of the world's population enters the industrial age.

Energy prices do drive our economy. It is foolish and shortsighted to take an adversarial posture against American companies that seek to develop American energy resources. We should encourage domestic investment and domestic energy production, especially as our energy needs are expected to grow by nearly 40 to 50 percent over the next couple of decades.

Oil and natural gas are just a small piece of that overall puzzle in meeting the energy needs of future generations. We have the capability and technology to responsibly pursue American-made energy through domestic exploration. Let us not forget that for every barrel of oil that we produce here at home, it is a barrel less that we have to import from someplace abroad. And every new natural gas field that is discovered and becomes technologically possible to explore makes the U.S. more secure from both an economic and natural security perspective.

We owe it to working Americans to put partisan politics aside and pursue long-term solutions. It defies common sense that some continue to shun coal, nuclear and increased domestic exploration as part of the solution. Continued pursuit of such shortsighted policies will prove devastating.

It is well known that natural gas will play a more prominent role in a carbon-restrained world. In fact, the success of any climate change policy will need to rely heavily on natural gas. Yet some Members of Congress are seeking to pursue policies that would take a majority of our domestic natural gas off the table.

I strongly oppose those efforts, and it sounds like Secretary Chu agrees with that sentiment. Last week when asked about hydraulic fracturing, he said, "If it can be extracted in an environmentally safe way, then why would you want to ban it? I think it can be

done responsibly."

We are a Nation of the world's best and brightest minds. The success and innovation of the two companies testifying today is an important example of that. With a greater emphasis on harnessing new technologies and American ingenuity, rather than government regulations that block America's resources, we can address our expanding energy needs in an environmentally and economically sensitive manner. We should support actions that reduce America's dependence on energy from unsustainable and unstable foreign governments and dictatorships. I see this merger as contributing to that end.

I yield back my time.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Washington State Mr. Inslee.

### OPENING STATEMENT OF HON. JAY INSLEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. INSLEE. Thank you. I am very much interested in the testimony today. I think this is a good news-bad news and a big question here.

The good news is this would suggest that a major energy producer sees the possibilities of natural gas, which is a— cleaner from a carbon dioxide energy source than coal. There is good news

that a major producer sees that potential.

There is some potential bad news in the long term view, however, which is that while this investment, I am told, is somewhere in the range of \$40 billion, the Chinese are investing in zero CO<sub>2</sub> sources of energy while we are still seeking fossil fuels, and that is troublesome. China is investing \$12 billion an hour in renewable energy. They plan on having 30 gigawatts of wind in the next two decades. They just announced the largest photovoltaic solar energy plant in the world in construction in western China.

We know that in a carbon-constrained world, the good news is that natural gas could help us in the short term and alleviate some of our CO<sub>2</sub> load. The bad news is if ExxonMobil and others are not making the investments necessary to go to zero and extremely low CO<sub>2</sub> levels, then we are going to be left in the dust by China and other countries that really are making these massive investments. And we have to get out of the gates in that race or be left behind. So I will be interested in listening to Exxon's plans in that regard.

Lastly, I will be interested in listening to Exxon's plans to make sure we are a carbon-constrained world. If ExxonMobil is making this investment under the assumption we will be, we would like to have a little help in the U.S. Senate to pass an energy bill that will, in fact, constrain carbon dioxide. So we hope we end up with

good news on all of those aspects, and I look forward to the testimony. Thank you.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Illinois Mr. Shimkus. Mr. Shimkus. Mr. Chairman, I wasn't here when the gavel dropped.

Mr. MARKEY. I am sorry. Then the Chair recognizes the gen-

tleman from Pennsylvania Mr. Pitts.

## OPENING STATEMENT OF HON. JOSEPH R. PITTS, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. PITTS. Thank you, Mr. Chairman. Thank you for holding this

hearing on this pending ExxonMobil and XTO merger.

Recently the Wall Street Journal stated that the merger "has been widely viewed as the biggest endorsement yet for shale gas production, both in the U.S. and abroad, because ExxonMobil, the largest U.S. oil company by market value, has more wherewithal to develop unconventional natural gas resources such as shale."

We are excited about the resource potential of natural gas in the Commonwealth of Pennsylvania. The Marcellus shale formation of the Appalachian Basin potentially represents the largest unconventional gas resource in the United States. The American Petroleum Institute cites that natural gas already meets 24 percent of U.S. energy demand. In addition, it heats 51 percent of U.S. Households, cools many homes, and provides fuel for cooking. There are also over 120,000 natural gas vehicles being driven on roads all across the United States. Natural gas burns much cleaner than gasoline or diesel, making it more environmentally friendly and better for our atmosphere.

The pending merger of ExxonMobil and XTO would create the largest natural gas producer in the United States with the largest

base of domestic reserves in the industry.

There is one thing that people across the ideological spectrum can agree on: When it comes to the issue of energy, the United States needs to produce far more clean energy from a source that does not rely on the whims of tyrants in far-off parts of the world. I believe that natural gas will help us achieve our energy independence and make our environment cleaner, and I look forward to hearing from our witnesses today on the vision for further exploration and use of natural gas in the United States.

I yield back.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Pennsylvania Mr. Doyle.

# OPENING STATEMENT OF HON. MICHAEL F. DOYLE, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF PENNSYLVANIA

Mr. DOYLE. Thank you, Mr. Chairman, for holding this important hearing today, and thank you to Mr. Tillerson and Mr. Simpson for traveling here to provide testimony on the proposed merger.

If you talk to people in my neck of the words, in Pittsburgh, Pennsylvania, about energy issues, there is a lot of excitement and optimism. In western Pennsylvania we realize you need the whole breadbasket of energy to be successful in America. Westinghouse makes the AP–1000 in western Pennsylvania. We have the National Energy Technology Lab that does research on carbon capture and sequestration so that coal has a future in our region. We have been known as a steel city, but pretty soon we may be known as the Saudi Arabia of natural gas with the Marcellus shale sitting underneath western Pennsylvania.

So, we are excited about what it means for the economic future of our State. Last year alone Pennsylvania could attribute nearly 50,000 jobs to environmentally safe natural gas production. I have long supported the development of domestic natural gas resources as one of the solutions to meeting the growing energy demands in the United States. This proposed merger between ExxonMobil and XTO Energy demonstrates the importance of unconventional gas resources for our energy portfolio.

We have had enormous success in my State of Pennsylvania with horizontal drilling in natural gas shale plates, and I am hopeful that the merger between these two companies will produce even better technology and more efficient drilling techniques. Many consider the Marcellus shale to be in its infancy of development, and while we are all eager to exploit the clean energy resources beneath our feet, it is equally important to develop these resources in an environmentally sound and economically feasible way.

My State, Pennsylvania, has done a great job in regulating the natural gas industry, while allowing it to grow and prosper. Both ExxonMobil and XTO Energy have been a part of this growth, and I look forward to their continued involvement in Pennsylvania.

Mr. Chairman, thank you. I yield back the remainder of my time.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the Ranking Member of the full committee, the gentleman from Texas Mr. Barton.

### OPENING STATEMENT OF HON. JOE BARTON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. BARTON. Well, thank you, Mr. Chairman, and thank you, Massachusetts. I know we are here to talk about hydraulic fracturing and energy, but I want to say, since this is the committee of primary jurisdiction over healthcare, people ought to listen to what happened in Massachusetts.

When a State that hasn't voted for a Republican Senator since 1972 when I was a senior in high school, only 2 years removed from Joe Namath and the Jets winning the Super Bowl, which could happen again this year, by the way, Mr. Chairman, although Joe Namath won't be the quarterback, people ought to listen. The healthcare bill is dead.

If my friends on the Majority really want to work together, we will work to try to come up with a healthcare reform with the accent on reform that works. But who would have ever thought that a conservative Texas Congressman would be saying, thank you, Massachusetts? But it happened.

Now, on today's hearing I want to welcome my friends from ExxonMobil and XTO. We are here to talk about domestic energy,

and we are here to talk about our natural gas reserves and the

issue of hydraulic fracturing.

I am a small, small, small partner in a natural gas well in Johnson County, Texas, in the Barnett Shale, and that is probably my 4-year-old son's college education. So I am very supportive of the

concept of domestic energy production.

I am very supportive of private ownership and stewardship, and I think, Mr. Chairman, you have got two excellent leaders in the energy sector here who want to merge their companies to be even more efficient and more productive for producing more American-made energy. It is a proper role for this subcommittee to take a look at that merger and some of the issues that are associated with it, but I don't think there needs to be any mistake that the more energy we make in America, the better off we are going to be.

Again, Mr. Chairman, thank you for two things: Holding this hearing, and not running for the Senate in Massachusetts. I think had you run, I think the outcome would have been different, and your side would be smiling this morning, and my side would not be. We would be smiling for you personally, but we wouldn't be smiling that the Ds won. We are glad you decided to stay in the

House.

I yield back.

[The prepared statement of Mr. Barton follows:]

Statement of The Honorable Joe Barton
Hearing entitled "The ExxonMobil-XTO Merger: Impacts on U.S. Energy Markets"
Subcommittee on Energy and Environment
Committee on Energy and Commerce
January 20, 2010

Thank you, Mr. Chairman, for calling this hearing. Today we will examine the merger of Exxon Mobil with XTO Energy and the deal's implications on natural gas and energy markets.

Over the past several years, natural gas has become an increasingly important part of our domestic energy supply. Even many proponents of a cap-and-trade system for slowing global warming, which as many of you know I am not, have extolled the virtues of natural gas as a fuel with half the carbon content of coal when used to generate electric power. Anyone who wants energy security, cleaner air, or lower carbon emissions must want more natural gas development. Its continued domestic development is vital to our energy future.

Today we have before us two leaders in the energy industry, XTO and Exxon Mobil, both of which have a long and historic presence in North Texas. Though Mr. Simpson and Mr. Tillerson are not constituents of mine, their respective companies employ many people in the 6<sup>th</sup> District of Texas. XTO has 3,100 employees in the Dallas-Fort Worth area, and as part of the terms of this merger, those employees will remain in their posts. In the past decade, the work of several independent producers like XTO has completely changed the economic landscape of North and Central Texas. The technology known as hydraulic fracturing has been a gamechanger in the U.S. natural gas industry. This process, along with other improvements, has allowed the country to increase its domestic production of natural gas by 65% over the past 10

years. We are now able to produce gas in enormous quantities in places no one believed gas even existed. The modern use of fracking is, without question, the most significant technological advancement in the oil and gas industry in decades.

This feat of engineering has been a particularly positive development for property owners sitting atop formations like the Barnett Shale in North Texas. Starting in the early 2000s, companies like XTO started buying land and leases for new gas drilling. Through years of research, the industry poured billions of dollars into what promised to be a revolutionary technology, and the results have been spectacular. With massive new discoveries in the shale rock, tight sands, and coal seam formations of Texas, Colorado, Pennsylvania, West Virginia, Louisiana, Oklahoma, and others, we have made this country more energy independent and therefore more secure. Jobs have sprouted up all over the country for engineers, geologists, landmen, roughnecks, welders, pipefitters, steelworkers... the list goes on.

As an engineer by trade, the intricacies of new science and technology that vastly improves our economy remain very interesting to me. And I'm encouraged to see what an industry is capable of accomplishing when allowed to function in a free market without undue regulatory burdens. Unfortunately, some fear that this progress and its obvious benefits are a threat to our environment. I believe this is an unfounded fear. And while there are some who would use the heavy hand of federal regulation to stop unconventional gas production, I believe this would have catastrophic consequences to our domestic supply of gas, to the jobs created to harness this resource, and to commodity prices on the international marketplace. I cannot think of a more irresponsible way for Congress to act.

I applaud the work done by Mr. Simpson and his company to bring hydraulic fracturing to commercial scale. XTO has proven to be a leader in the field, and their successes have benefitted the country as a whole. The last thing Congress should consider is a way of preventing such successes by others in the future.

I am glad we are holding this hearing today, Mr. Chairman. I very much look forward to testimony and questions from both sides. Thank you - I yield the balance of my time.

Mr. Markey. I thank the gentleman very much. I would say that the politics may have changed, but the problems that we have to solve have not as we sit here today, whether it be energy, health care, Wall Street. The same problems still exist, so we will all have to continue to move forward to solve those problems. But I thank the gentleman for his personal support of my noncandidacy. I thank you.

Let me now recognize the gentleman from Georgia, Mr. Barrow.

Mr. BARROW. I waive an opening statement.

Mr. Markey. Great.

The Chair recognizes the gentlelady from California Mrs. Capps.

### OPENING STATEMENT OF HON. LOIS CAPPS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mrs. CAPPS. Thank you, Mr. Chairman, for calling this hearing to review the pending merger between ExxonMobil and XTO Energy, and thank you to the CEOs of each of these companies for appearing to testify today.

This merger raises a number of issues with respect to the future direction of the U.S. domestic oil and gas industry and the potential environmental impact of increased unconventional natural gas

development. I am eager to learn about it.

We know that natural gas is the cleanest of the fossil fuels. It produces less than half as much carbon pollution as coal and one-third of petroleum burned in cars. Gas findings in several States have increased the proven reserves and driven potential reserves even higher, it is my understanding, and recent technological advances have made the development of unconventional natural gas resources more affordable. This creates an opportunity to use natural gas as a bridge fuel, signaling a 21st-century energy economy that relies on efficiency, renewable sources and low-carbon fossil fuels such as natural gas.

However, there are legitimate public health and global warming concerns about the impact from natural gas production. I am eager to learn about these as well. Adjacent communities are concerned, as am I, about the public health impacts from the use and release of toxic substances that are used in natural gas production processes. This is an issue that deeply concerns me, and it is an issue our committee should continue to look into.

But, for today, I am looking forward to us taking a closer look at this proposed merger. I look forward to the testimony that you are about to present, especially regarding investments that you are making to serve three paramount national priorities: growing our economy, securing our Nation's energy supplies, and combating global warming.

Thank you, Mr. Chairman. I yield back.

Mr. MARKEY. The gentlelady's time has expired.

The Chair recognizes the gentleman from Texas Mr. Burgess.

### OPENING STATEMENT OF HON. MICHAEL C. BURGESS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. Burgess. I thank the Chairman. I, too, want to welcome two friends and two companies who are very important to my district in North Texas. I have an opening statement that I will submit for the record. I don't know if I will get through all the points that I need to make.

But this merger is an important one. It highlights Exxon's commitment to shale production in regions like north Texas, and it is important that that development continue to grow and provide jobs, and, yes, be developed in an environmentally sensitive way. I think we all have an interest in that, because, after all, we live in the area where this activity is occurring.

I was heartened to hear from both Mr. Tillerson and Mr. Simp-

son that one of the critical factors in ExxonMobil-XTO's merger

was XTO's employee knowledge base in shale development.

Congress does rightly share a great deal of the blame for the way things are going in this country right now. We have almost singlehandedly destroyed every sector of the American economy, financial, housing, except for health care and energy, and it looked like this year that we were trying to destroy those as well. This is an opportunity for us to learn how perhaps we might be helpful.

We have been helpful in the past. Research and development dollars provided by this committee in previous energy bills allowed for the development of the recovery of gas from the tight shale formations, and Congress justifiably should share some of that credit.

But we have also been deleterious towards many of the other aspects toward developing energy, American energy from American companies, which we have heard over and over again. And Boone Pickens has said it so clearly: You can either be for natural gas, or you can be for foreign oil, and I will put my lot with natural gas.

We were all heartened a year ago, 2 years ago, to hear the Speaker of the House say that natural gas is not a fossil fuel, so I think the globe warming issue was taken off the table by the Speaker of the House, and I, for one, was grateful for her leadership on that.

I will submit the rest of my statement for the record. I thank the witnesses for being here and very much look forward to their testi-

Mr. Markey. The gentleman's time has expired. [The prepared statement of Mr. Burgess follows:] Congressman Michael C. Burgess, M.D.
Opening Statement
Subcommittee on Energy & Environment
Hearing entitled "The ExxonMobil-XTO Merger: Impacts on U.S.
Energy Markets"
January 20, 2010

Thank you, Mr. Chairman.

I hope that today's hearing will focus on the very important and positive merger between ExxonMobil and XTO Energy, and not become a forum to attack so-called "Big Oil" or use scare tactics against the responsible energy production both of these companies have pursued for decades.

I was very pleased to hear of the merger between these two companies and the economic impact this will have on my own district back in North Texas. XTO Energy has been a productive employer in the Fort Worth region, employing some 1,250 men and women in the area and contributing to the relatively low unemployment figures my district has seen compared to the national averages.

Indeed, the Barnett Shale, which covers much of my district, has been an economic boon to the region, providing steady income and jobs to many

of my residents. Shale production has been effectively and safely utilized to provide natural gas to thousands of Americans, and produces a clean, abundant resource for people to heat their homes and run their vehicles, and create electricity. Across the country, communities are recognizing the positive effects that shale production has produced.

This merger clearly highlights Exxon's commitment to shale production in regions like North Texas, and I'm hopefully that development will continue to grow and provide jobs. I was heartened to hear from both Mr. Tillerson and Mr. Simpson that one of the critical factors in Exxon pursuing XTO was XTO's employee knowledge-base in shale development. I understand that Exxon and XTO intend to keep XTO's headquarters in the Fort Worth area, and likewise intend to retain most of the 3,300 employees at XTO, including the 1,250 located in North Texas. I look forward to working with both of you to ensure XTO's continued presence in the Fort Worth region. I hope, as you continue to develop the Barnett Shale and others, it will mean increasing your payroll in the area. My constituents have seen first-hand the positive

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economic impacts that this production has shown, and are eager to see how it can continue to help grow the region.

Again, I hope that this hearing will focus on the positive contributions this merger will have on the development of clean natural gas in this country. I look forward to working with both witnesses in the future as the company expands even further in the Fort Worth area.

With that Mr. Chairman, I yield back.

Mr. Markey. The Chair recognizes the gentleman from Cali-

fornia Mr. McNerney.

Mr. McNerney. Thank you, Mr. Chairman, for calling this hearing. This is a very important merger, so it is good that we have you in front of us today. I have been very excited to see the effect of horizontal drilling on the natural gas prices over the last 5 years. Supplies have become more plentiful. The prices have gone down.

I am also concerned about the environmental impacts on drinking water. So I don't know if you are going to address that today

or not, but it is something that we are concerned about.

I am also concerned about the impact of this big merger on our national economy, on jobs. So I look forward to seeing how you are going to address that issue. It is something we care about deeply in California, since our unemployment is about 18 percent.

So I thank you for coming, and I yield back.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Illinois Mr. Shimkus.

#### OPENING STATEMENT OF HON. JOHN SHIMKUS, A REP-RESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. SHIMKUS. Thank you, Mr. Chairman.

It is times like this that I miss John Peterson, our former colleague from Pennsylvania, who was like the foremost Member who really talked about the benefits of natural gas for the manufacturing arena, for everyday costs. He would always hold up a map—in fact, this is one of his old maps of the world and the competitive disadvantage we have because of high natural gas prices. As you know, supply and demand, new opportunities can help lower costs.

He would remind us about that natural gas is 70 to 80 percent of the cost of fertilizer, which is important to the agricultural economy. Farmers use it for irrigation, crop drying, food processing, crop protection and nitrogen fertilizer production. We know about home heating in the Midwest. It is all, in essence, natural gas. We know it in the manufacturing community. Plastics, it is a key ingredient. We just need to have more.

Now, I am going to continue to reject putting the words "carbon" and "pollution" together. I think the failed Copenhagen meetings and Climategate and the coverup there, along with job losses, is also going to put to rest this whole climate issue and that carbon dioxide is a pollutant, and we will continue to fight against any move to do that.

But we can agree on energy security, and that is where more supply, a diversified portfolio are so critical. Whether it is coal, natural gas, nuclear power, hydroelectric, wind, solar, we need that for energy security for this country.

That is why this is so important. This technology is great. It is underneath the water table. There is no fear. We should not do any more harm and intervene anymore in the current rules and regulations

I appreciate this hearing, and I yield back my time.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Texas Mr. Green.

### OPENING STATEMENT OF HON. GENE GREEN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TEXAS

Mr. GREEN. Thank you, Mr. Chairman, and it is great that my colleague from Pittsburgh is going to have more of my folks from Houston coming up there in Pittsburgh. We are going to hear from him a lot more, I guess, if it is going to be the next energy capital.

I want to thank you, Mr. Chairman, for holding this timely hearing on the ExxonMobil-XTO merger and its impacts on the U.S. Energy markets. Financial and energy analysts have touted the significance of this merger's potential, the fifth largest U.S. energy company acquisition since 1995, and what it may forecast for future U.S. and world energy demands.

There is no doubt that a combined ExxonMobil-XTO entity would be a major player in U.S. exploration and production activities. XTO, headquartered in Fort Worth, Texas, has extensive expertise

in tight gas, shale gas, shale oil and coalbed methane development, which plays in the most unconventional resource basins in the U.S. Combined with ExxonMobil's considerable financial capabilities, global resource base and advanced R&D capabilities, ExxonMobil-XTO would hold almost 10 percent of all proven U.S. Natural gas

reserves and become the largest U.S. natural gas producer.

Some analysts have raised questions as to whether the merger signals further widespread consolidation in America's energy industry or shifts in strategy for the large, integrated oil and gas companies. Traditionally onshore unconventional gas players have been dominated by smaller independent companies, while majors have focused on offshore, where resource bases are sufficiently large to justify significant investment required for production.

With decreased U.S. natural gas production last year, and with increasing costs for gas producers to acquire new acreage and expand production capabilities, new partnerships with integrated

companies may increase the access to untapped resources.

Most importantly, the proposed merger validates the demand for clean-burning natural gas as a fuel source, which will only continue to grow. By 2030, natural gas will be the largest source of energy globally, and demand could further increase as governments consider imposing costs on carbon emissions.

With half the carbon emissions of coal and 30 percent less emissions than oil, natural gas is our most critical transition fuel as we move towards cleaner energy. With recent advances in technology to extract more natural gas from unconventional gas resources, such as extended reach, horizontal drilling or hydraulic fracturing, we can unlock America's 100 years' supply of natural gas.

This hydrofracking, U.S.-developed technology, is being exported to Europe and China. Due to environmental-economic benefits of natural gas production, Congress and the administration must be diligent, as we consider policies to address global climate change,

to utilize our domestic energy resources.

I yield back my time.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Oregon Mr. Walden.

#### OPENING STATEMENT OF HON. GREG WALDEN, A REPRESENT-ATIVE IN CONGRESS FROM THE STATE OF OREGON

Mr. WALDEN. I thank you very much, Mr. Chairman.

I want to welcome our witness here today, our witnesses. Thank you for being here.

I don't have an opening statement per se, but I do have some things I hope you will address in your comments and your testi-

mony.

It seems to me two of the biggest issues we face in the country today are connected, and those are jobs and energy. I grow concerned about the amount of energy potential that we have in the United States, and yet the amount that is kept off limits for devel-

opment by the Congress and the Federal Government.

So I would be interested to know both in terms of the sort of jobs that are created by your industry, by your company, what you see in terms of the opportunity to create new jobs going forward through this merger, and also the amount of natural gas and all that could be developed and what that could mean for America and American jobs.

I, for one, am eager to get America on a new energy path, one that uses our own great resources, invests in our own country, rather than send all this money overseas or to foreign countries, some of which plot against us, and some of which clearly are not our best friends. So I hope you will talk about the technologies that are coming forward that your companies have been involved in. I hope you will talk to us about how big these resources are, and what we need to do to gain access to those, and what benefits could be derived from them, and what it means in terms of the economy and jobs for America going forward.

It looks to me like if we can invest in our own resources using new technologies in environmentally safe ways, we can generate revenues to the government and create jobs in our hometowns.

I look forward to your testimony, and with that, Mr. Chairman, I yield back my time.

Mr. MARKEY. The gentleman's time has expired.

The Chair recognizes the gentleman from Texas Mr. Gonzales.

Mr. GONZALEZ. I waive opening.

Mr. Markey. The gentleman waives his opening.

The Chair recognizes the gentleman from North Carolina Mr. Butterfield.

# OPENING STATEMENT OF HON. G.K. BUTTERFIELD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. BUTTERFIELD. Thank you, Mr. Chairman. I, too, want to thank you for convening this hearing, and especially to the two witnesses. I anticipate very eagerly your testimony today.

nesses. I anticipate very eagerly your testimony today.

Mr. Chairman, the proposed merger that we are talking about today recognizes the energy industry's recognition of natural gas as an important bridge fuel for the coming years. The goal of curbing carbon emissions while also becoming energy independent in this country are captured in the increased use of natural gas. So this is a good thing.

Burning natural gas produces 50 to 70 percent fewer greenhouse gas emissions than other fossil fuels and will be critical to achieving an 83 percent decrease in greenhouse gas emissions by 2050. We can do it, and we are going to do it, contrary to what many of

my friends on the other side suggest.

As we continue to develop technology to sequester carbon from coal, the demand for natural gas will continue to grow. In Wayne County in my North Carolina district, Progress Energy announced a decision last August to convert three coal-fired powered plants to natural gas. Duke Energy in my State has ongoing plans for several natural gas power plants. Energy companies across the U.S. are dealing with the future of a carbon-constrained environment by moving to natural gas.

Growth in unconventional natural gas production also greatly expands America's reserves and our ability to be energy independent. Expansion of exploration and production in the Barnett, Marcellus and other unconventional sources has increased 65 percent since

1998.

In 2008, 91 percent of our supply came from domestic sources. Continued growth in the domestic natural gas market is good for energy independence, so long as there is appropriate competition—and I stress that, appropriate competition—to ensure fair pricing and commitment to environmental stewardship.

We would be wise to carefully consider the impact, economically and environmentally, of this merger. The incredible growth of unconventional production must be mirrored by regulatory activity

that ensures the public trust.

I have run out of time, Mr. Chairman, but thank you very much for recognizing me. I look forward to the testimony of these two men.

I yield back.

Mr. Markey. We thank the gentleman.

The Chair recognizes the gentleman from Oklahoma Mr. Sullivan.

# OPENING STATEMENT OF HON. JOHN SULLIVAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OKLAHOMA

Mr. SULLIVAN. Thank you, Mr. Chairman. Thank you for having this hearing.

I want to thank our two witnesses, Mr. Tillerson and Mr. Simpson. Thank you so much for what you are doing. I wish the Congress would take your lead on this very important issue of natural gas in our country.

When we look at energy policy in this country, long-term natural gas supplies should be a big part of it. I am from Oklahoma. It is the third largest gas-producing State in the United States, so I

have a vested interest in this.

That is why it is so important that we use natural gas for the other things, like transportation fuel. That is why I am the Republican author of the Natural Gas Act. I think it is very important that we use it for transportation fuel. There are 10 million natural gas vehicles around the world, and we have about 150,000 here in the United States.

Also, I want to hear more about we do have a large reserve of natural gas here in the United States, so it is American energy. We lessen our dependence on foreign oil, like others have said. But one of the reasons we have gotten so much of that is because of the drilling techniques, the horizontal drilling and the hydraulic fracking.

I read a report, and you guys would know more, but I hear like 60 to 80 percent of the wells drilled in the next 10 years are going to have to use hydraulic fracking, so I think it is horrible, it would be detrimental to this country if they outlaw that practice.

Also I am concerned, and I want to hear what you have to say later on, about the EPA removing the exemption of hydraulic

fracking from the Safe Drinking Water Act.

Also, you know, we hear Barack Obama and others, President Obama, talk about all the stimulus spending and the taxing are creating all these jobs, yet unemployment has gone up. I just want to commend you, because what you are doing right here, this is how jobs are created right here. The government doesn't do it; the private sector does it. We have about 2 million people that work in the energy industry in this country, and they are going to lose jobs if these things go into effect. We want to create jobs, and I want to commend you for that as well and hear more about that as well.

Thank you very much.

Mr. MARKEY. The gentleman's time has expired.

The Chair recognizes the gentleman from Vermont Mr. Welch.

Mr. WELCH. Thank you very much, Mr. Chairman. I look forward to hearing the testimony about this.

I just want to say on two things: One, obviously natural gas is a very important component of energy. Its contribution to global

warming is a good deal less than other sources of fuel.

Secondly, I just say this to ExxonMobil: As a huge and very successful energy company, well run, I would urge you to get much more active on bringing attention and bringing solutions to the climate change problems that this country faces. ExxonMobil does have a history of resistance to acknowledging how severe that problem is. It has rhetorically changed its ways in some respects recently. It has devoted a substantial amount of funds to advertising. But I understand that it still is very resistant, or so it said, to playing a much more active role that its prominence in the industry would allow it to play.

So this merger has significant questions about competition, about energy, about costs, but it also, I think, has significant implications as to what role ExxonMobil is going to play in assisting this country in addressing the problem of climate change.

Thank you, Mr. Chairman. I will yield back.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Florida Mr. Stearns.

### OPENING STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. STEARNS. Thank you, Mr. Chairman. I want to thank you for calling this hearing.

I am very supportive of this proposed merger, but I would sidetrack. I just showed you a map of Massachusetts in the red and blue, and it appears your congressional district still remains under "Democrat," but it looks like most of Massachusetts, including all out to Cape Cod, is now in the red. I spent 4 years in South Deerfield. That part of the area looked like it remained Democrat. But I think you made a wise decision, based upon looking at this map.

Mr. Markey. If nothing else, this election made it possible for you to publicly announce that you were in South Deerfield for 4 years. Now you feel a little bit more comfortable.

Mr. Stearns. I understand.

I think my colleague on that side talked about fracturing and how they are concerned about the drinking water, but I would say to him that since the 1940s, hydraulic fracturing has helped to produce more than 7 billion barrels of oil and 600 trillion cubic feet of natural gas in the United States. So the oil and gas industry strongly believes that the continued use of hydraulic fracturing is essential to produce more of the oil and natural gas that the U.S. will consume in the next decades ahead.

According to the American Petroleum Institute, up to 80 percent of natural gas wells drilled in the next decade will require, will simply require, hydraulic fracturing, and without it most of our country's abundant natural gas resources cannot be produced. So I hope my colleagues on that side will not be overly concerned

about the impact on the drinking water.

One thing I will say, Mr. Chairman, there was an article dealing with this merger in the press. It said XTO has hedged more than half of its natural gas production for 2010, or about 1.25 billion cubic feet per day, with some additional hedges already in place in 2011. By contrast, ExxonMobil says it makes little use of derivative instruments to hedge oil and gas production. So I guess maybe one question that will come out of this hearing is what will this deal mean for trading operations going forward at XTO?

Mr. Chairman, with that, I thank you again for the hearing, and

I look forward to the witnesses' opening statements.

Mr. Markey. I thank the gentleman very much.

The Chair recognizes the gentlelady from California Ms. Matsui.

### OPENING STATEMENT OF HON. DORIS O. MATSUI, A REP-RESENTATIVE IN CONGRESS FROM THE STATE OF CALI-**FORNIA**

Ms. Matsul. Thank you, Mr. Chairman, for calling today's hearing.

I would like to also thank the panelists for appearing before us today, and I look forward to hearing your views on the recently proposed merger at your companies and the ramifications of this agreement for the U.S. oil and gas markets.

As we continue to discuss ways in which to address global climate change, it is imperative that the Federal Government support approaches that are effective, innovative and efficient. It is equally important, however, that we ensure that the merger not adversely impact North American oil and natural gas markets, and with regard to production, competition, prices and consumers.

The ExxonMobil-XTO deal may prompt its peers to move towards similarly and consolidate an already tight oil and gas market, creating additional concerns for the regulatory bodies that oversee the oil and gas supply. More importantly, studies have shown that fewer participants in energy can lead to both lower and higher prices for consumers. We cannot allow our best intentions to encourage the expansion of natural gas to impair our ability to protect the health, safety and welfare of the American people.

While it is also critical that we embrace new technologies, we cannot do so at the expense of clean water, clean air or our coun-

try's security.

I look forward to working with my colleagues to examine these issues and to making certain that the proposed merger is in keeping with our efforts to save our environment and generate new jobs.

Mr. Chairman, I thank you for calling today's hearing, and I yield back the balance of my time.

Mr. Markey. We thank the gentlelady.

The Chair recognizes the gentleman from Louisiana Mr. Scalise.

### OPENING STATEMENT OF HON. STEVE SCALISE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF LOUISIANA

Mr. Scalise. Thank you, Mr. Chairman.

The energy industry is critical in my home State of Louisiana, and the Haynesville Shale Play, along with other major natural gas finds around the country, have changed the landscape of our country's energy outlook. I look forward to learning more about this merger and its impact on our Nation's energy economy, and I welcome the panelists to our committee.

As we discuss the issue today, we cannot overlook the fact that our country lacks a comprehensive national energy policy that will put the U.S. on a path to energy independence. Instead of working in a bipartisan manner to help break our dependence on Middle Eastern oil and create new jobs, this administration and the liberals running Congress are sending our country down a path of economic destruction while pursuing a radical environmental agenda that will lead to nothing more than millions of American jobs being shipped overseas to countries like China and India at a time when our American families can least afford it.

The cap-and-trade energy tax, along with the threat of heavy-handed EPA regulation of carbon, represent the most drastic and dangerous attempts to hijack our country's energy sector. In my home State of Louisiana, thousands of jobs will be lost under a cap-and-trade energy tax. As a matter of fact, there is a company that is currently basing their decision to locate in either Brazil or south Louisiana on what Washington does on the cap-and-trade energy tax.

These dangerous proposals, taken together with their efforts to create a government takeover of health care, along with the reckless spending and borrowing, will destroy the fabric of our country, cripple our economy, and place an overwhelming burden on our children and grandchildren.

It seems, Mr. Chairman, that this administration and those running Congress will stop at nothing to pursue this liberal agenda

that is killing our economy, resulting in thousands of dollars in higher taxes for American families and small businesses, and ship-

ping millions of American jobs overseas.

Instead of pursuing this radical agenda, it is time for this administration and the liberals running Congress to finally listen to the American people, and the result of last night's election in Massachusetts should serve as a wake-up call that the American people have rejected this liberal agenda. They want us to focus on jobs, and they deserve better than the back-room deals being made on health care.

Thank you, and I yield back.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Arizona Mr. Shadegg.

#### OPENING STATEMENT OF HON. JOHN B. SHADEGG, A REP-RESENTATIVE IN CONGRESS FROM THE STATE OF ARIZONA

Mr. Shadegg. Thank you, Mr. Chairman. And I want to thank

our witnesses. I look forward to hearing your testimony.

It is widely known that the merger between ExxonMobil and XTO Energy is conditioned on hydraulic fracturing remaining legal and practicable. I think this raises for this Congress yet one more occasion to visit the issue of public policy, and to do it in a balanced and reasonable way.

There is virtually no nation, indeed I think no nation in the history of mankind, that has locked up more of its natural resources and done more damage to its job base than this country in the name of protecting its natural resources and its environment.

On the one hand, that is appropriate. We should be careful to protect our environment. But on the other hand, I hope we as a Nation have begun to learn that that has to be done with great balance and care, because irrational restrictions can cause us to do what we are doing now, which is to buy our energy from foreign sources who have no interest in our national security, and indeed are often our enemies, and who will not do the job of extracting that energy in as clean a fashion as we would.

In 2007, 77 percent of the natural gas we consumed in the United States came from the United States. A vast majority of our domestic supply is accessible only through hydraulic fracturing, a technique that has been used to extract gasoline or oil for more than 50 years. The EPA itself found, quote, "no confirmed cases that are linked to fracturing fluid injection into CBM wells or subsequent underground movement of fracturing." Further, although thousands of CBM wells are fractured annually, EPA did not find confirmed evidence that drinking water wells have been contami-

nated by hydraulic fracturing.

It is incredibly telling that this kind of merger has to be conditioned on the government not pursuing an irrational policy which will lock up our own natural resources. I commend the people that have put this deal together. I believe it is in our Nation's interest, and I think it is time that we focus on producing American energy in America, American jobs in America, and protecting our own environment, rather than relying on foreign resources where they do no better job of protecting their environment, which is indeed our environment as well.

With that, I yield back.

Mr. Markey. The Chair recognizes the gentleman from Texas Mr. Hall.

Mr. HALL. Mr. Chairman, thank you. I subscribe to everything Mr. Shadegg said, and, gosh, are we going to miss him.

Mr. Markey. The gentleman's time will be preserved for ques-

tions if he would like.

Now, we have completed all opening statements from members of the subcommittee, but we have Ms. DeGette, who is here with us, a member of the full committee. By unanimous consent, we will grant her 2 minutes, if she would like, to make an opening statement.

# OPENING STATEMENT OF HON. DIANA DEGETTE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF COLORADO

Ms. DEGETTE. Thank you so much, Mr. Chairman. I appreciate your and Ranking Member Upton's comity for allowing me to participate in the hearing.

Being from Colorado, of course, I am a very strong supporter of natural gas development. It is a clean domestic energy resource

and a big source of jobs in my own State.

In the merger agreement between ExxonMobil and XTO, there is language effectively allowing ExxonMobil to cancel the merger if laws are enacted making hydraulic fracturing "illegal or commercially impracticable." Seeing as I have introduced legislation on hydraulic fracturing, this piqued my interest.

Good news. My bill would not make hydraulic fracturing illegal, nor would it make it commercially impracticable. I support the use of hydraulic fracturing. Please let me say that again. I support the use of hydraulic fracturing. But I also support it being done in an

environmentally responsible way.

Currently there is no requirement under Federal law to disclose the chemicals used in hydraulic fracturing, although we know that many of those chemicals may be highly toxic. The oil and gas industry is the only industry exempted from one of the Nation's landmark drinking water laws, the Safe Drinking Water Act, and, frankly, all of our constituents have the right to know what chemicals are being used in their community, particularly if they are near underground sources of drinking water.

My bill would simply require disclosure of the constituents used in fracking fluids, while protecting the proprietary formula, much like we require Coca-Cola to list its ingredients, but not its secret

recipe.

What my bill would do is simply restore the EPA's authority to ensure that hydraulic fracturing does not endanger drinking water under the Safe Drinking Water Act. That seems reasonable and simple to me. I think that is our job as Congress.

I look forward to the testimony today, and also to working with the industry to make sure we can support hydraulic fracturing, while at the same time making sure it remains environmentally

Mr. MARKEY. The gentlelady's time has expired. We thank her for joining us today.

All time for opening statements by Members has been completed, so we will now turn to our panel and welcome them to our hearing.

Our first witness this morning is Mr. Rex Tillerson. He is the chairman and the CEO of the ExxonMobil Corporation. Mr. Tillerson has held a variety of management positions in domestic and foreign operations since joining the Exxon organization in 1975.

We thank you for joining us, Mr. Tillerson. Whenever you are ready, please begin.

STATEMENTS OF REX TILLERSON, CHAIRMAN AND CEO, EXXONMOBIL CORPORATION; AND BOB R. SIMPSON, CHAIRMAN OF THE BOARD AND FOUNDER, XTO ENERGY, INC.

#### STATEMENT OF REX TILLERSON

Mr. TILLERSON. Chairman Markey, Ranking Member Upton, members of the subcommittee, thank you for the opportunity to appear here today.

Americans face a critical challenge: continuing to develop affordable, reliable and secure energy supplies needed to grow our economy and create jobs, while also continuing to improve environmental aspects of energy production and use. The combination of ExxonMobil and XTO is an important step towards addressing this challenge.

The development of our combined resources will create the opportunity for more jobs and investment in the production of cleaner-burning natural gas spread across many parts of the United States. It will support our Nation's economic recovery, strengthen our Nation's energy security, and help meet our Nation's environmental goals.

At ExxonMobil we focus on the long term. The global scale of our industry, the volatility of the world commodity market in which we compete, and the decades-long timeframes of our projects require us to plan far into the future.

Our agreement with XTO is consistent with this approach. It combines the complementary strengths of our two companies: XTO's technical expertise and their substantial unconventional natural gas resource base in the United States, and ExxonMobil's own global resource base, our advanced research and development, proven operational capabilities, our global scale, and, importantly, our financial capability. It will better position us to meet America's long-term needs for affordable, reliable, clean-burning natural gas.

Enabling a strong and growing U.S. economy requires meeting America's total energy needs, including fuels to power their businesses, heat their homes and generate electricity. Increases in domestic natural gas supplies can meet an increasingly important share of these needs. This is due in large part to important technologies pioneered by ExxonMobil, XTO and others which enable us to unlock enormous supplies of unconventional natural gas in the United States.

With recent advances and extended-reach horizontal drilling, combined with the time-tested technology of hydraulic fracturing, a process in use for more than 60 years, we can now find and produce unconventional natural gas supplies miles below the sur-

face in a safe, efficient and environmentally responsible manner. Thanks to innovations such as these, unconventional natural gas is projected to meet most of America's domestic natural gas demand by the year 2030, representing a substantial change in the overall

energy profile of the United States.

In the 5-year span ending in 2008, the U.S. Energy Information Administration estimates that the U.S. Total proven natural gas reserves increased by 30 percent to 245 trillion cubic feet, or the equivalent of about 41 billion barrels of oil. In an 18-month span ending in mid-2008, natural gas production in the United States increased 13 percent to 57 billion cubic feet per day. That is an amount equivalent to all of the natural gas production in the entire United Kingdom. And total U.S. natural gas resource estimates have increased 35 percent in the last 2 years. From this, Americans can now count on nearly a century of domestic natural gas supply at current rates of consumption.

In addition to its domestic abundance, natural gas holds several other advantages for Americans. It is the cleanest burning of the fossil fuels, emitting up to 60 percent less carbon dioxide than the current leading fuel source used to meet America's electricity

needs.

Natural gas production is also responsible for significant economic activity, job creation and revenues for local, State and Federal Governments in the United States. In 2008, it contributed \$385 billion to our Nation's economy and supported more than 2.8 million American jobs. More than 622,000 of these jobs were through direct employment, representing a 20 percent increase in job employment since the year 2006. Significant job growth occurred in many States, including Arkansas, Colorado, North Dakota, South Dakota, Utah and Pennsylvania.

Discovering, developing and delivering clean-burning natural gas is integral to the work of the U.S. oil and gas industry, which in 2007 alone contributed more than \$1 trillion to the Nation's econ-

omy and supported more than 9 million American jobs.

The challenge Americans face is significant. To reverse our Nation's economic difficulties, meet our energy needs and reach our environmental goals, we all must do our part. Governments help by upholding stable tax and regulatory policies which encourage competition on a level playing field; consumers help by using energy efficiently; and industry helps by taking the risk to develop new energy technologies and new, cleaner-burning energy resources, such as unconventional natural gas.

In my view, the combination of XTO and ExxonMobil will enable us to more effectively play our part in addressing the challenge our Nation faces and will help create the integrated solutions that provide Americans with the energy supplies, the energy security, the environmental protection and the economic growth they expect and that they deserve.

Thank you.

Mr. MARKEY. Thank you, Mr. Tillerson.

[The prepared statement of Mr. Tillerson follows:]

Rex W. Tillerson
Chairman and CEO, Exxon Mobil Corporation
U.S. House of Representatives
Subcommittee on Energy and Environment Hearing
January 20, 2010



Chairman Markey... Ranking Member Upton... members of the Subcommittee.

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Enabling a strong and growing U.S. economy requires meeting Americans' total energy needs – including fuels to power their businesses, heat their homes, and generate electricity.

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Thanks to innovations such as these, unconventional natural gas is projected to meet most of America's domestic natural gas demand by 2030, representing a substantial change in the overall energy profile of the United States.

In the five-year span ending in 2008, the U.S. Energy Information Administration estimates that U.S. total proven natural gas reserves increased by about 30 percent to 245 trillion cubic feet, or the equivalent of about 41 billion barrels of oil.

In an eighteen-month span ending in mid-2008, natural gas production in the United States increased 13 percent, to 57 billion cubic feet per day, an amount equivalent to <u>all</u> natural gas production in the United Kingdom.

And total U.S. natural gas resource estimates have increased 35 percent in the last two years. From this, Americans can now count on nearly a <u>century</u> of domestic natural gas supply at current rates of consumption.

In addition to its domestic abundance, natural gas holds several other advantages for Americans.

It is the cleanest-burning of the fossil fuels, emitting up to 60 percent less carbon dioxide than the current leading fuel source used to meet Americans' electricity needs.

Natural gas production is also responsible for significant economic activity, job creation and revenues for local, state and federal governments in the United States.

In 2008, it contributed \$385 billion to our nation's economy and supported more than 2.8 million American jobs. More than 622,000 of these jobs were through direct employment – representing a 20 percent increase since 2006. Significant job growth occurred in many states, including Arkansas, Colorado, North Dakota, South Dakota, Utah and Pennsylvania.

Discovering, developing and delivering cleaner-burning natural gas is integral to the work of the U.S. oil and gas industry, which

in 2007 alone contributed more than \$1 trillion to our nation's economy and supported more than 9 million American jobs.

The challenge Americans face is significant. To reverse our nation's economic difficulties, meet our energy needs, and reach our environmental goals, we must all do our part.

Governments help by upholding stable tax and regulatory policies which encourage competition on a level playing field.

Consumers help by using energy efficiently.

And industry helps by taking the risk to develop new energy technologies and new, cleaner-burning energy resources, such as unconventional natural gas.

In my view, the combination of XTO and ExxonMobil will enable us to more effectively play our part in addressing the challenge our nation faces, and will help create the integrated solutions that provide Americans with the energy supplies, the energy security, the environmental protection, and the economic growth they expect and deserve.

Thank you.

Mr. Markey. Our next witness is Mr. Bob Simpson, the chairman of the board of XTO Energy, Incorporated. Mr. Simpson was one of the founders of XTO in 1986 and has been chairman and chief executive officer or held similar positions with the company ever since.

We welcome you, sir. Whenever you are ready, please begin.

# STATEMENT OF BOB R. SIMPSON

Mr. SIMPSON. Thank you, Chairman Markey, Ranking Member Upton, and members of the subcommittee. Thank you for the opportunity to let me appear here today to discuss our merger with Exxon.

Our agreement builds on XTO's nearly quarter century of success in developing affordable, reliable, cleaner-burning U.S. unconventional natural gas supplies for use by Americans.

From a humble beginning in west Texas, I learned a lot about hard work and long hours with our family farm and my family members. I also got smart enough to realize that our great American education system could open up far-reaching opportunities beyond those of sandy cotton and peanut fields in west Texas.

The government was there to help. With the support of one of my heroes, the iconic President John F. Kennedy, a generation of kids got the financial assistance to pursue their academic dreams during the 1960s. I was one of them. My dreams took me to Baylor University, where I learned and also earned two degrees with honors. From this strong foundation I am proud to have built a career in the exciting and challenging and critical industry of energy here in the United States.

Some of you may not be familiar with XTO, so let me share with you a little of our history. I believe it is a great American success story.

We started in 1986 as a company called Cross Timbers Oil Company, with a handful of people, as I recall about seven, no oil and gas assets, some big aspirations and about \$35 million of investor money. In the early lean years, the company did not make enough for me to justify a salary.

In 1993, we went public with an initial market cap of about \$200 million. In 2001, we changed our name to XTO, because too many investors thought Cross Timbers was in the timber business. XTO had been our ticker symbol on the New York Stock Exchange since it went public in 1993.

We focused on hiring talented people, encouraging innovation, and turning low-producing oil and natural gas resources into higher-producing ones.

Later we turned our attention to the U.S. unconventional natural gas before many others did. As a relatively abundant, cost-effective, cleaner-burning U.S. energy resource, we felt unconventional natural gas had enormous potential in supporting the United States' growing demand for energy.

I believe we made the right call. Today, we are one of the leading producers of natural gas in America, with a total resource base equivalent to 45 trillion cubic feet of natural gas. Our shareholder equity has grown from the 35 million in 1986 to 31 billion in our proposed merger. For the last decade, our stock performance was

number two for all stocks on the New York Stock Exchange, with an average increase of 42 percent per year in appreciation. Our production grew by 714 percent in the fields during that same time, and we employ today 3,300 men and women, virtually all in the United States.

Throughout our history we have focused on developing technology and operating practices that enable us to produce energy resources safely, efficiently, and in an environmentally responsible manner. Every employee of XTO shares in our commitment to operational excellence. This commitment has led us to success for our company and our country.

There is growing evidence that, at current consumption rates, America now enjoys a more than 100-year supply of natural gas here in the States; and with changes in technology and constantly evolving production innovations we may have only scratched the surface.

As we have grown and developed, we have always been mindful of the future on how we could continue to best develop the opportunities that we have been able to identify. In reviewing our future path, we realize that we needed to look at options to take what we have achieved and bring it to a new and higher level. We recognize that the opportunities before us could best be reached, their potential, if we could find an organization that could bring additional shale technology and financial capacity to the work we have been doing.

I am pleased to say that we found that organization in ExxonMobil. Our proposed merger would enable us to continue to apply the technical expertise and operational excellence we are known for to a greater number of unconventional natural gas opportunities throughout the United States. It will continue our strengths, our ExxonMobil strengths, including its R&D, project management, operational integrity, and environmental performance and financial capacity.

Moving forward, ExxonMobil intends to establish a new upstream organization to manage global development and production of unconventional resources, enabling the rapid development and deployment of technologies and operating practices to increase production. The new organization will be located in Forth Worth, Texas, at XTO's current offices.

Additional production of domestic and unconventional gas will result in increased supplies of energy, which will lead to expanding markets, all of which significantly enhance our energy security.

I strongly believe this proposed merger is a good deal for our shareholders, our employees, and our consumers here in the United States. We will support our Nation's economic recovery and energy security while also helping meet our Nation's environmental goals.

I am proud of our company's success over the years and look forward to continuing that success with ExxonMobil in the years to come.

Thank you.

[The prepared statement of Mr. Simpson follows:]

Bob R. Simpson
Chairman and Founder, XTO Energy Inc.
U.S. House of Representatives
Subcommittee on Energy and Environment Hearing
January 20, 2010

Chairman Markey... Ranking Member Upton... members of the Subcommittee.

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Today we are one of the leading producers of natural gas in America with a total resource base equivalent to 45 trillion cubic feet of gas. Our shareholder equity has grown from \$35 million in 1986 to \$31 billion in our proposed merger. For the last decade our stock performance was number two for all stocks on the New York Stock Exchange (NYSE) increasing on average 42% a year. Our production grew by 714% and our full-time workforce now numbers more than 3300 men and women, nearly all of them working in the U.S.

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produce energy resources safely, efficiently and in an environmentally responsible manner. Every employee of XTO shares in our commitment to operational excellence.

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I am proud of our company's success over the years, and look forward to continuing that success with ExxonMobil in the years to come.

Thank you.

Mr. Markey. The Chair will now recognize himself for a series of questions.

Mr. Simpson, this revelation that you show that the companies were able to make that we have all of this additional natural gas

is really a credit to your efforts.

My question to you is this: There is a lot of fuel shifting that goes on when natural gas is plentiful, and 2008 is a good example where there was 10,000 new megawatts of gas-fired power that was installed in America, 8,000 new megawatts of wind but only 1,100 new megawatts of coal. In 2009, there wasn't one new coal-fire plant ordered in the United States. How do you see this going forward, especially because of the profile of where the Marcellus shale is and some of these other formations in terms of fuel substitution going forward? What is the future of coal and electrical generation in your opinion?

Mr. SIMPSON. I think in my planning for the company we recognized—all the way back to 1996 we shifted our focus from balanced oil and gas companies and natural gas, and then our growth was based on natural gas. We recognized it as the clean burning fuel in America. To be honest about our consumption of fuel in America, 90 percent of it is either coal, oil, or gas; and, of those three, gas is clearly the superior fuel for the future in bridging to a lower car-

bon environment.

So I, again, speak for the natural gas industry; and my own personal belief that natural gas is the wave of the future and the exciting news is it is not academic. We have found enough leads to resources in America that we will be able to put fuel behind that belief and supply.

Mr. MARKEY. So you see it as an ever-increasing use of gas in

Mr. SIMPSON. I do. I think there will be an ever-growing need for natural gas, particularly in the area of electrical generation, as has been demonstrated over the last few years; and the good news is we will be able to supply that. It won't just be a need.

Mr. MARKEY. Thank you.

Mr. Tillerson, could you compare the economics of onshore and offshore production of natural gas, given the breakthroughs that Mr. Simpson and others have made and now your announced merg-

er with his company?

Mr. TILLERSON. Well, the relative economics are not that different, and the reasons are in order for offshore resources to be commercial—in particular in the locations where we are discovering large resources offshore, which is in deeper water-it takes a very large accumulation, so you have to have a very large discovery over which you can then put very expensive production and extraction facilities.

So the total economics of the resource extracted through the investment floats on the water against taking a similar size resource onshore and developing it with literally thousands and thousands of wells and the infrastructure that go with that are comparable. So the differences are really technical challenges.

Mr. Markey. Do the comparison then, as well, with the importation of liquefied natural gas, if you would, from other countries and with bringing down more natural gas from Alaska in terms of the economics, given the fact that Marcellus and Barnett are indige-

nous and right there in the region.

Mr. TILLERSON. Well, clearly the emergence of these large, now discovered and proven unconditional resources are going to act to put pressure on the economics of every other source of natural gas, particularly those that either have to come from long distances, LNG, or have to come from Arctic regions like the Alaska natural gas pipeline simply because the market now has greater supply available to it. So that is going to require that those other sources are going to have to continue to find ways to reduce their cost in order for them to compete at what the market prices will likely be in the U.S. It is simply a matter of now more supply available here locally more closely to the lower 48 markets than we previously would have thought even 5 years ago.

Mr. Markey. So you are projecting lower prices for LNG as a re-

sult of these discoveries and your merger?

Mr. TILLERSON. Well, the price-setting mechanisms here in the United States are going to be unchanged. It is still going to be largely supply-demand driven pricing mechanisms. There are very, very few long-term natural gas contracts any longer in the United States. We long ago through deregulation and the restructuring and evolving of natural gas markets have gone to much shorter type of sales arrangements. So the supply signals are quite immediate in terms of what the demand—

Mr. Markey. In general, will the domestic supply——

Mr. TILLERSON. More supply is going to put pressure on prices. Mr. MARKEY. So you think the longer term trend is lower prices for imported gas than otherwise if this supply had not been identified here domestically.

Mr. TILLERSON. I think without question, without this supply. Because the unconventional supply is going to represent an evergrowing component of the total U.S. natural gas supply. Over the next 20 years, it is going to be supplying upwards of half of our total natural gas supply in the United States. So, clearly, you introduce that level of volume into the marketplace, it affects every other source of supply.

Mr. Markey. The gentleman from Michigan, Mr. Upton.

Mr. Upton. Thank you, Mr. Chairman.

I would like to start off by saying I think for many Americans when they think of discovery of both oil and gas and the production of it, they go back to that movie the Beverly Hillbillies. The Clampetts put in a pipe, and there it is. They don't necessarily understand that you have to have injection to get the oil out and you may not have to use the process, the fracturing that is prevalent today. And as I look at this map—which I think you all have it; it was on our chairs here—I have actually been and looked at the Barnett operation, hear great things from my colleague, Mr. Pitts, about the Marcellus, Bakken, and other resources around the country

But, really, without that hydraulic fracturing, you wouldn't be able to get, what, 20 percent, maybe out of these fields?

Mr. TILLERSON. You would get zero, because it would be non-commercial to develop those resources.

Mr. UPTON. So it is, as I think most of our—all of the colleagues here on the panel, regardless of Republican or Democrat, we understand the importance of that.

In the documents on the merger itself, I think there is some language that if, in essence—I am paraphrasing here—that Congress takes action to limit or restrict hydraulic fracturing, the deal is, in essence, off; is that right?

Mr. TILLERSON. That is correct.

Mr. UPTON. Would you like to elaborate on that at all? Have you looked at Ms. DeGette's bill? Does that qualify as one of the problem areas?

Mr. TILLERSON. As the language indicates, if it either prohibits or no longer makes it commercial. As you have heard Mr. Simpson's comment in his remarks in response to the questions, what has enabled this new source of natural gas supply to the U.S. is a combination of integrated technologies, but a key component is hydraulic fracturing. And without hydraulic fracturing the gas that is locked in the shale rock stays locked. It just stays there.

The existence of this resource has been known for decades, but we did not know or have the techniques to unlock the gas so that it would flow from the shale rock into the wellbore. We have drilled through these shales for years, and they don't flow when we drill through them. So if you remove hydraulic fracturing as one of the key enabling technologies, this resource can no longer be recovered.

So, obviously, our deal would make no sense.

The provision that is in the merger agreement is one that—these are standard types of provisions you would find when two companies talk about mergers and they talk about the risks. And so it is in there to protect the ExxonMobil shareholders in the event something transpires before this deal would close. And I think it is just a recognition that we see a lot of regulation that comes out of the Congress and the U.S. Government that provides little benefit. But there is an enormous propensity to regulate in this country. So it is a recognition that that is a risk.

Mr. UPTON. Mr. Simpson, do you want to add to that at all?

Mr. SIMPSON. That provision on our side was allowed.

Our view of it is—going back in my career I remember in the late 1970s we viewed in America that we were running out of natural gas. We thought it was an 8-to-10-year supply. I built a home in Forth Worth, Texas, that I couldn't get natural gas to, and I am in Texas. Now that house is sitting on the largest natural gas-producing field in America today.

And so what I would say is that what has allowed us to go from a psychology of shortage to one of abundance in essence is the technology of hydraulic fracturing. I just don't believe that, given that as a consequence, there is any real risk of legislation that would

prohibit that practice.

Mr. UPTON. So this really is a win-win. I mean, we have got these great resources and because of the increased supply it will further push downward pressure on the cost as it impacts consumers across the country.

Thank you. I yield back.

Mr. Markey. The Chair recognizes the gentleman from Washington State, Mr. Inslee.

Mr. INSLEE. Mr. Tillerson, our job and Congress' job is job one

is jobs now, as you know, for obvious reasons.

I want to ask some questions of this merger as it pertains to the ability of the United States to really seize the economic opportunities in the new nonfossil fuel-based systems in addition to natural gas.

First, I want to ask, does Exxon believe that human-caused emissions of carbon dioxide and some other gasses are changing, at

least to some degree, the Earth's climate?

Mr. TILLERSON. Well, we have said for some time that there is no question climate is changing, that one of the contributors to climate change are greenhouse gasses that are a result of industrial activities—and there are many greenhouse gasses besides CO<sub>2</sub>, which I know you know that. And the real challenge I think for all of us is understanding to what extent and therefore what can you do about it. And it is a scientific challenge. We view it as a risk management problem. There is a risk. The consequences, if those risks play out, are pretty dire.

So our view for some time has been, first and foremost, let us continue to support the scientific investigation of what is one of the most complicated areas of science that people are studying today, and that is the climate, the science around climate and what affects the climate. It is extremely complicated. And we have supported that work and I know the Congress has made funds to support that work and we support the scientific advancement of understanding this issue. The better we understand that, the better the technology solutions then will be provided and will be provided in the most cost-effective way to consumers the world over.

So, yes, we acknowledge that it is a contributing factor. Where I think we have differences and where we perhaps talk past one another from time to time is that, being a science and engineering company, we understand the science, we understand the difficulties of modeling the science. And there are a number of very complicated models that have been developed by people who are studying the issue around the world to try and first replicate what has happened so we understand the science and then predict the fu-

ture.

And as we look at the competency of those models, there is not a model available today that is competent, and I think all of those people who run those models would acknowledge that. So we say keep studying it.

In the meantime, the risks are significant, the consequences could be dire so we should take action. And we are taking action ourselves, and we are engaged actively in the discussion here in the Capitol on both ends of the Congress around what various pol-

icy options might be sensible.

Mr. Inslee. The reason I ask you that is that I still get letters from some constituents saying humans are not involved in changing the climate. It is egocentric to think that humans can cause a change in the climate. And I am going to report to them that the leader of the largest energy company in the United States believes that we are one contributing factor to climate change. I am going to report that to them. I hope they will listen to that, as a person with tremendous scientific background, as your company has, with

some of the most brilliant engineers in the world working for you believe that and now the question is what is the right response.

Am I correct in assuming that your decision to enter into this acquisition in part is induced or motivated at least in part in a belief that we will be in some version of a carbon constrained world in

the future in some sense? Is that one of your motivations?

Mr. TILLERSON. Well, every year we undertake our own internal energy outlook: What are the demands for all forms of energy going to be? What are the supply sources going to be? And we have identified now over the last few years the growing response of natural gas, much of which we would attribute to consumers around the world understanding that there are moves under way and already our policies are in place in much of the world, in Europe, European countries and elsewhere, that do put a price on carbon and that does shift you towards natural gas demands.

Here in the United States we expect natural gas demand to grow about 20 percent over the next 20 years. It is going to grow in its relative contribution, much of which is due to our view that eventually there is already an incentive I think among most consumers and companies to lower their carbon footprints so there is a natural incentive. Natural gas also provides from an energy efficiency

standpoint a number of favorable attributes as well.

So it was in a consideration. I wouldn't tell you that we priced it in. I would tell you that in all of our investment decisions, though, we have, in our economic modeling, we put a carbon price in our economic decisions and project something for the future so that we at least are considering what the effects on our investments might be in the years to come.

Mr. INSLEE. Thank you.

Mr. Markey. The Chair recognizes the gentleman from Texas, Mr. Barton.

Mr. Barton. Thank you.

Because of my good friend Mr. Inslee's question about climate change, I have to have somewhat of a rebuttal to that.

Mr. Tillerson, what is ExxonMobil's position on the Markey-Waxman's bill as it passed the House? Do you all support it or oppose it?

Mr. TILLERSON. We oppose the Markey-Waxman bill because we are opposed to cap-and-trade systems as policy options. We do not feel that they are the most cost-effective way to put in place the

proper incentives for people to be more efficient.

Mr. Barton. In your opinion as chairman or CEO of the largest privately owned energy company in the world and certainly in the United States, if Waxman-Markey were to actually be passed—which luckily it is not—but if it were, could the United States, in your opinion, in a cost-effective way or maybe in any way at all meet the target of reducing CO<sub>2</sub> emissions 85 percent by the year 2050 from the 2005 baseline?

Mr. TILLERSON. Well, obviously, you can meet any target if you don't care what it costs. So if you are willing to suffer enormous job loss and reduced economic activity—because one of the ways you achieve those targets is you shut activity down. That is the easiest way to reduce emissions, is just don't emit them.

Mr. BARTON. So in your role again as CEO of the largest privately owned energy company in the world and certainly in the United States, you have to minimize risk to your stockholders and maximize employment opportunities for the employees under your direction. So your acknowledgment to Mr. Inslee is simply a prudent business decision that that is the real political world that ExxonMobil is in and that you need to be prepared to adopt to that reality.

Mr. TILLERSON. As I indicated in our economic price index, we have to make some assumption about what the future might be. We have to do the same about what we think the price of the commodity will be, the price of business will be. So the fact that we include a price on carbon is an acknowledgment that there is a likelihood that there will be a price. There already is in some parts

of the world. So it is in our price index.

Mr. Barton. I have got before me two of the best American CEOs of companies, not just energy companies. Mr. XTO has already said that he had the greatest rate of return on the New York stock market over the last X-number of years. We have all seen the stories about ExxonMobil's rate of return. We will stipulate that you two gentlemen are pretty good at what you do and the country is glad that you are good at what you do.

Mr. Tillerson, what does ExxonMobil get by merging with XTO?

Mr. TILLERSON. As we have studied the unconventional resource space globally, we have identified it has enormous potential, certainly here in the United States which I know we are most interested in today. But I know there are enormous unconventional resources globally in many countries that would be very important not just to their country but to the global energy balance.

Mr. Barton. Do you classify the tide shale formations that XTO

has as unconventional?

Mr. TILLERSON. Unconventional would be the shale gas, coalbed methane gas, ultra-tight gas. The type of resource holdings that XTO has amassed here in the United States, ExxonMobil has been taking acreage positions around the world.

Mr. BARTON. What does XTO get by merging with ExxonMobil,

Mr. Simpson?

Mr. SIMPSON. Our main advantage would be, having brought it to here, the opportunities we face are so large that we need capital to explore those and to tap those successfully.

Now, we also enjoy joint expertise which we will put together. Their advanced R&D and their global scale will bring exciting opportunities to the staff.

Mr. Barton. You will get their expertise in capital.

Is there any indication from either of your staffs that the Justice Department or the SEC is going to be negative on the merger?

Mr. TILLERSON. We have only just begun that dialogue with them, including answering their questionnaire. So I wouldn't want to be so presumptuous as to prejudge.

Mr. Barton. The press reports indicate that it doesn't give—the merged company wouldn't have a corner on the domestic energy market, and by all of the standard anti-trust metrics this is a merger which appears to fit within those parameters.

Mr. TILLERSON. Under all of those HSR metrics that are typically used to judge competitive elements, this merger does not give rise

to a concern in any of those areas.

Mr. BARTON. So if we can prevent the Congress or the EPA from mucking around in hydraulic fracturing, this merger should go through. Because you have got a codicil in your pending merger agreement that if Congress passes legislation that I guess either party has the right to call the merger off; is that correct?

Mr. TILLERSON. That would be correct.

- Mr. Barton. My final question is a personal question, Mr. Chair-
  - Mr. Simpson, where is Steve Palko these days?

Mr. SIMPSON. Palko, one of the founders of XTO-

Mr. Barton. And an original Barton backer, contributor.

- Mr. SIMPSON [continuing]. Was always very interested in education. In fact, he served on the National Education Committee here in Washington, and he went back 5 years ago and got his Ph.D. And is teaching at TCU.
- Mr. Barton. So you would indicate when he left the company is when it really took off?

Mr. SIMPSON. That is what I would tell them.

Mr. BARTON. If you see him, tell him his old friend Joe Barton says hello.

Mr. SIMPSON. OK. I will tell him.

Mr. BARTON. Thank you, Mr. Chairman.

- Mr. Markey. And by the way, thank you for letting Massachusetts be allowed into the country.
- Mr. Barton. We wouldn't have a country if it weren't for Massachusetts.
- Mr. Markey. We like to think we started that whole Tea Party thing up in my district.

Mr. BARTON. Massachusetts saved the country last night.

Mr. Markey. Massachusetts invented a lot of the things the country enjoys today.

The Chair recognizes now the gentleman from Pennsylvania, Mr. Doyle.

Mr. DOYLE. Thank you, Mr. Chairman.

- OK. Let us get one thing out of the way. Mr. Tillerson, do you have any knowledge of any Member of the House or the Senate or the Obama administration that is calling for outlawing hydraulic fracturing?
  - Mr. Tillerson. No.
  - Mr. Doyle. Mr. Simpson?

Mr. SIMPSON. No.

Mr. Doyle. Does anyone on this committee have any knowledge of any Member of Congress or the House or the Obama administration that is calling for the outlawing of hydraulic fracturing? In Congress—House, Senate, Obama administration.

So the answer is "no."
So now let us talk about half of this bogeyman.

Mr. Barton, I will get to you later.

- Mr. Barton. I have some knowledge of some Members who would like to outlaw it.
  - Mr. Doyle. So there is nothing proposed, but in your mind—

Mr. BARTON. I have had discussions with Members who would like to outlaw it.

Mr. DOYLE. Yielding back my time.

Let us talk about now whether or not this is commercially im-

practicable. It is not a term we use in Pittsburgh a lot.

Pennsylvania, we have rules in place to protect our underground sources of drinking water. I talked to Mr. Stearns and asked if he wanted to be a Pennsylvania water tester so that he could drink the water first before the rest of us had to do it, but he declined.

But, in Pennsylvania, in order to obtain a permit, drillers must identify any anticipated impacts of water withdrawals on water resources. Wells cannot be drilled within 200 feet of structures or within a hundred feet of streams or wetlands. Pennsylvania law requires drillers to case in grout wells through all freshwater aquifers before drilling through deeper zones in order to protect ground water from pollutants inside wells. DEP inspectors investigate resident complaints about water quality. There is a presumption that well operators are responsible for any pollution of nearby ground water, and well operators are required by law to replace or restore adversely affected public or private drinking water supplies.

There are also rules that require operators to disclose all chemicals to be stored and used at a drilling site, including chemicals and fracking fluids in order to guard against contamination and ensure safe disposal of these chemicals. That is Pennsylvania law.

Now, Mr. Simpson, XTO currently operates natural gas wells in Pennsylvania, true or false?

Mr. TILLERSON. That is true.

Mr. Doyle. Very good. In view of the 181 billion cubic feet of natural gas produced in Pennsylvania in 2006 alone, is it safe to say that Pennsylvania regulations have not made it commercially impracticable to extract Pennsylvania's extensive natural gas reserves?

Mr. SIMPSON. From our experience—first of all, our drilling in Pennsylvania is very limited to a handful of wells. So in our experience we have been able to comply in any one area we might want to examine to see if it impedes in terms of going beyond where we are. But, again, it is not our primary focus in terms of where we drill.

Last year, we drilled about 1,200 wells and, as far as I remember, none in Pennsylvania. We have drilled—well, a few in Pennsylvania being 2009. So, again, it is not our—where the mass of our operations are. And my own personal knowledge is limited as to the operations in Pennsylvania.

Mr. Doyle. But at least when you bought LINN Energy, that included about 152,000 net acres of Marcellus shale leasehold. So you currently have that and you have no intentions of pulling out of Pennsylvania. You want to drill that Marcellus shale, do you not?

Mr. SIMPSON. We do, and that was primarily in Pennsylvania

and West Virginia.

Mr. DOYLE. Very good. So I guess since you are not pulling out of our State and Marcellus shale is an opportunity for you—and, by the way, we love having you in Pennsylvania. We want to get that gas out of the ground. We are all for doing that. But the regulations that are already in place in Pennsylvania don't seem to be

stopping you from considering Pennsylvania as part of your operation.

Mr. SIMPSON. That is correct.

Mr. DOYLE. So my question is, because this Marcellus shale formation goes over several States and we have some laws that have regulations—some States that have regulations, some States that have no regulations and everything in between, would a national regulatory framework, would that create uniformity and predictability for a company like yours? Do you think it makes more sense that you just have one law that creates some predictability for you, or do you like this patchwork of maybe, you know, 50 different laws if each State adopts their own laws?

Mr. SIMPSON. Our industry and historically our company is built in a variety of States: Texas, Oklahoma, New Mexico, primarily, and Louisiana. And what I would say is that we have adapted to each individual State's rules and regulations. We believe that that has been a successful program and that the environment and related industry issues are regulated satisfactorily, I believe, for both us and the consumers and the citizens through State regulations.

Mr. Doyle. I see my time has expired. I have lots of questions about leasing practices, and I see that we in Pennsylvania have a lot to learn from our friends in Texas and Louisiana, and I would like to explore that if there is a chance for a second round of questions.

Mr. Markey. The Chair recognizes the gentleman from Texas, Mr. Burgess.

Mr. BURGESS. I would like to explore, if possible, that horizontal

drilling from north Texas up to Pennsylvania.

It is impossible to overstate the economic value to our area that the Barnett shale has brought. The country entered a recession in 2007. I don't think we felt it in our area until December of 2008, a full year later than the rest of the country.

Mr. Simpson, you talked about the house without the ability to heat with natural gas. I remember being in an all-electric home in the 1980s as well. We just had a very bad cold snap like we just had these back couple of weeks back in the 1980s, and the electric bill was \$7- or \$800 for heating the home in 1980 dollars.

These past 2 months in Texas have been brutally cold. Our gas bills have in some cases been almost a hundred dollars to heat a similar-sized house. So it is a substantial economic benefit for jobs and development in our area, and it is a substantial economic development in delivering energy at a reasonable cost to people who

live in north Texas.

So it is with a great deal of relief that you two are sitting together at this table and looking, exploring the possibility of linking up the knowledge base with XTO with the capital and the ability to scale that ExxonMobil has. I think that is likely to be a very rewarding development.

I think Cliff Stearns asked a very provocative question earlier in his opening statement. If I could just ask you to address it a little

bit.

Mr. Tillerson, your company does not deal much with derivatives and hedging and, Mr. Simpson, your company does presumably because of different missions and what have you and the size of your two companies. But how will this work going forward and what should we look to as what is going to be the activity as far as de-

rivatives and hedging?

Mr. TILLERSON. Congressman, I think the use of the hedges in the way that XTO has traditionally used them is fairly common for companies of their size. They are also growing their business at the rate of pace that they are growing as a means of just providing for secure cash flow so that they can keep their ongoing activities under way with some type of forward planning basis.

As you noted, because of ExxonMobil's size and our global scale, our cash flow and our financial structure is quite different. So we have never used hedges or derivatives as part of our financing

structure.

The reference to the limited use that we have for those are on physical contracts to make physical delivery. The crude oil primarily—and it is to cover very short periods of time when crude is in transit, primarily 30, 60 day kind of contracts, and that is just to manage the risk of exposure across a short period of time. But they are not used as a financial instrument for ExxonMobil because they are not needed for our financing structure; and so, in the future, we would not be continuing those hedging programs.

Mr. Burgess. So as far as how that impacts the consumer, the ratepayer at the end of the stream, likely to be perhaps the opportunities for more stability in pricing and less of the wild swings

that we saw in the summer of 2008.

Mr. TILLERSON. It is hard to say. Because the hedging of activities of XTO, while certainly important to them, on the grand scale of the natural gas markets may not be significant. So I think that is very hard to say what if any impact the removal of that hedging activity from the market is going to have.

activity from the market is going to have.

Mr. Burgess. On strictly the local scale, the number of jobs provided by both companies in the area is significant. The location of the corporate headquarters in Fort Worth for XTO has been important to areas around my district. What will happen with jobs in

corporate location?

Mr. TILLERSON. One of the important elements—and as Congressman Barton was asking for why the merger was important—yes, we get access to XTO's large U.S. Domestic resource base, but a very important part of this merger is XTO's organization. They have a 20-year track record of having invested, taken a lot of risks to understand how the unconditional resource base can be profitably commercialized and brought to the market and provided to consumers.

We have built unconventional acreage holdings around the world. What we want to do is retain their organization. We want to retain their Fort Worth location as the headquarters of what will be the new global and conventional gas resource organization to use their know-how and their capabilities, bring some of our technology and R&D capabilities—because we have a significant R&D activity under way around the unconditionals—bring some of our project management capabilities and our financial stability and put the best of all of those together in this new organization in Fort Worth to create more opportunity to develop the resource here domestically.

But also we intend to use it as an opportunity to develop these resources globally. Because, to the extent we can develop more global energy supply, ultimately that is better for the U.S. consumer as well. So that is really the compelling part of putting the two together.

As a result, we expect to retain most of the XTO organization in

Forth Worth, and there would be very limited job impacts.

Mr. Markey. The Chair recognizes the gentleman from Utah, Mr. Matheson.

Mr. MATHESON. Thank you, Mr. Chairman.

I apologize. I haven't been here for the whole hearing. I have a hearing taking place in the Science Committee at the same time, so I have been moving back and forth between the two.

Mr. Simpson, I know there has been some discussion of hydraulic fracturing today, and perhaps some of it has taken place when I wasn't in the room. In your experience, have there been problems

with this technology that Congress needs to address?

Mr. SIMPSON. In my experience, there has not. The technology itself is about 60 years old. The event here is the combination of that traditional technology with the horizontal drilling techniques that have been developed particularly in the last decade; and the two combined have unlocked this resource that we are talking about today which I think, between tight gas techniques, hydraulic fracturing, it applies not only to shale gas but we also use it in virtually every well we drill. Our company specializes—and it always has—in long life reserves. Long life means generally tight reservoir or unconventional reservoir, low decline.

And while the country had a declined rate of X percent, ours was always about half of whatever the country's was so that we could more readily grow. So we have relied on that fracturing for a long time as a company. We virtually drill no wells that don't employ some form of hydraulic fracture.

Mr. MATHESON. Every well your company drills?

Mr. SIMPSON. Yes. Virtually every well.

It may not be used offshore or some more permeable reservoirs, but our properties are based on tight gas, and unconventional res-

ervoirs are what is included in tight gas.

And in my experience in the last few years we have gotten up to around a thousand-plus wells a year. We have had no examples of where we believe or there is evidence that we have contaminated a water zone, a freshwater zone, drinking water zone with this process. And undoubtedly the country has been doing it. There are over a million applications, and I believe the process is safe.

Mr. MATHESON. I guess for either witness I would ask, in your view, if Congress were to regulate fracking under the Safe Drinking Water Act, how would that affect energy production and why

would it be different from the State regulation of fracking?

Mr. SIMPSON. Well, again, it would be how you would implement it. Is there initially a ban? What is the transition? Again, the me-

chanics of it, and then is it applicable.

What I would say is that we have comfortably lived in 18 different States for a good while now subject to State regulation and without incident. So I don't believe it is necessary. I think the risk is, if we are not careful, we go backwards; and, frankly, going from

a psychology of shortage that I mentioned in the 1970s, we also banned the use of putting on new generation fired by natural gas in 1978. Again, the shortage crisis mentality. That limits markets. It moves fertilizer plants away. It dampens demand, increases more dependence on other sources. And so it lessens our energy security here in America.

So I think it is tantamount that we find a way to continue that

practice, because it is such a valuable thing to this country.

So I personally—we talked about earlier—will believe in the wisdom of Congress collectively, the greater wisdom, that it is—the practice will continue because it is safe and the consequence of not being able to do it for our economy is too grave.

Mr. Matheson. Thanks. I appreciate that.

Mr. TILLERSON. I do think, as Congressman Doyle in great detail described, the State regulation of the State of Pennsylvania is not unusual. Most States have very detailed regulations around our drilling activities and our hydraulic fracturing activities that govern the protection of the drinking water aquifers in all States. Those I think have been tested and they have been proven to be quite adequate. There have been over a million wells hydraulically fractured in the history of the industry, and there is not one reported case of a freshwater aquifer ever having been contaminated from hydraulic fracturing. Not one.

The EPA testified before the Congress last summer that they could not document a single case. The New York Water Resources Development Board investigated hydraulic fracturing. They could

not document any threat to safe drinking water.

So I think the real question is what is the need for Federal oversight other than it is going to add another layer to the State that will add cost. A uniform regulation, Congressman Doyle, would not be preferable, because the water aquifers and the geology are different for every State and they know their water resources and their requirements better than anyone up here is going to know and they are going to protect them better.

So the States are regulating this well, and a uniform rule would actually add a layer of complexity I think for the State regulator. And any time you add a layer, you add a cost. And when you add a cost you just knocked off an increment of production. Because somewhere out there is the marginal cost well and it doesn't get

drilled.

Mr. MATHESON. Thank you. I yield back.

Mr. Markey. The Chair recognizes the gentleman from Illinois, Mr. Shimkus.

Mr. Shimkus. Thank you, Mr. Chairman.

I appreciate the testimony here.

I think, in summation, the response to the last question from my friend Mr. Matheson was if the wheel is not broken don't try to fix

it. Is that an easy way to summarize those comments?

This is just not important for natural gas, and I understand the implications here. I represent a large portion of the Illinois basin, and we have a lot of—we used to be an oil center part of the country. Through new technologies, horizontal drilling and fractionation, we are now able to recover oil and keep these fields in production a lot longer than we ever thought we would have imagined that.

One of the newest finds a couple of years ago was underneath a State wildlife refuge, underneath a lake, and it has been operating now for 4 or 5 years. And, of course, if it is a State wildlife refuge you know the Illinois Department of Natural Resources is on that lake every day and watching it.

So we are excited about this. And my focus is energy security and the ability of the United States to make sure that we have the energy we need without being dependent on imported crude oil.

Now, the great thing about what our debates have always been is how do we do that or at least be independent using North American resources. We have to go in the Outer Continental Shelf. We have to take advantage of these new natural gas finds. And then we have got to use these new commodity products and allow the market to decide how to change that.

The Clean Air Act, which I talked about quite a bit and was very successful in cleaning up toxic emittents—that is why I had this climate debate, because carbon dioxide is not a toxic emittent. I don't care what people try to say here in this Chamber. It is not a toxic emittent.

Now the stuff we cleaned up in the Clean Air Act was toxic. But when we did the Clean Air Act it did affect your business plan on how do you deploy and what do you use technology for, coal or natural gas. You know, natural gas has been historically used in home heating, but now we can use it in transportation fuels. Now we can use it not just in peaking plants but there has been talk about using it for base-load generation. I would think my personal opinion is that would be a mistake. It is such a great resource to be able to use in a variety of proposals.

This would be the question. Based on the policies that we enact here, that does change the business plan for the deployment of those commodity products, does it not, Mr. Tillerson?

Mr. TILLERSON. Well, clearly, the regulations or mandates from time to time that are put in place change the relative economic choices that an investor has to develop energy resources or a consumer has to buy and consume them. So, without question, what is done here moves that needle back and forth. That is why we have always been a proponent and a strong supporter of keeping the playing field level, not mandating solutions but set the framework in place and then let the market forces pick the most efficient solutions

Whether natural gas belongs as a transportation fuel versus electric base load, right now our economic analysis would suggest that electricity base load is actually a much more efficient use of the gas than to use it in compressed natural gas vehicles. And we would be happy to provide you some of the work we have done because we study it all the time. We are in the transportation fuel business.

Mr. Shimkus. I appreciate that, because we will accept some help in being educated. But all I want is the market to decide that versus policy, which pushes commodities into an arena that may not be economically feasible and then you really waste a valuable resource.

So mine would always be about having the competitive advantage of the economy through competition set the best commodity for the best end use in that arena.

But what you did—if I can restate it, one thing you did highlight if you do establish another barrier by oversight and Federal regulation, that will affect how we decide to use this commodity product, would it not?

Mr. TILLERSON. I have never seen a regulation that has not seen a layer of cost.

Mr. Shimkus. I appreciate the comment.

I yield back.

Mr. Markey. The Chair recognizes the gentleman from Texas, Mr. Green.

Mr. GREEN. Thank you, Mr. Chairman, and a lot of the good

questions have been asked.

Mr. Simpson, first of all, I want to congratulate you for forming a company in 1986 with our energy situation the way we were in the 1980s representing my area in east Houston and north Houston. We had a depression in Texas, Louisiana, and Oklahoma because of energy prices. The rest of the country was coming out of the recession in the early 1980s, but we still were in it. So congratulations.

In fact, I have a joke that I was over in Louisiana one day visiting in 1987 and they found out I was from Texas. They said, oh, our energy prices are tough but in Texas you all have cattle. So that is what is taking care of you. I said, I have a rancher in west Texas that said he stole the cattle, stole the feed and still lost money. So cattle didn't take us out of our problems in the 1980s.

I have a concern about if fracking and the shale discoveries are so important for our country that if there is a problem—and I don't think there is because we have had some incidents—I know there was a well in Pennsylvania that had some problems with the wells from the residents in the area, but that was because the supplier of the concrete didn't provide the correct amount. There are problems, but it is so important, our national interest, that we need to fix it because we need that natural gas. We need that long-term, the hundred-years-plus viability we had.

In fact, my colleague and I—our good friend, Congresswoman DeGette, actually put some seats between us. We normally sit next to each other. Because I heard her statement and I support expansion. I just want to make sure we don't throw so many regulatory roadblocks that we can't have the shale protection not only in Texas, Louisiana, and Arkansas but also in the northeast and ev-

erywhere else.

Mr. Tillerson, I have to admit, coming from East Harris County, I have represented the ExxonMobil facility for many years as the State Senator, now in Congress, and I appreciate how ExxonMobil—Exxon originally, but ExxonMobil—treat their employees. I have a lot of constituents that are very happy retirees, and the support for your employees is really good.

I have noted in your statements several analyses have speculated whether a merger between ExxonMobil and XTO would signal further widespread consolidation of America's energy industry or a shift in strategy for the large integrated oil and gas companies focused back on U.S. Natural gas. In the past 18 months, BP, Statoil, ENI, and Total have also bought into the U.S. gas industry which

is primarily developed by small- and mid-size gas producers.

Do you believe that the ExxonMobil-XTO merger is a signal that large integrated companies will continue to invest more heavily in the U.S. unconventional natural gas fields either through acquisitions, mergers, or joint venture? And, if so, would market conditions lead to this increase in joint ventures and mergers, and what impact do you think it would have on the competition within the domestic market?

Mr. TILLERSON. Well, it would be hard for me to comment on what others will do. Clearly, this is an enormous resource opportunity, and we are all in the resource acquisition production business. So the fact, as you have already noted, that it has already attracted the attention of other major companies as well, both U.S.

and foreign companies who are investing in the resource.

With respect to what it does for competition, I think it is important to know that one of the attributes of the U.S. oil and gas industry is the enormous number of participants. The Natural Gas Association documents more than 6,000 gas producers in the United States. The EIA documents 13,700 oil and gas operators. This is a business that, while it contains a lot of risk, the hurdles to entry in this country where a person like Mr. Simpson can start on a very tough basis in a very tough economy, barriers to entry are fairly low. People who are willing and have the courage to take the risk can enter this business on a lease-by-lease basis and build a business.

The history of the energy is littered with riches and failures and bankruptcies, and that is just the nature of it. But one of the real competitive attributes in this country is that it has that char-

acteristic and there are thousands of players.

The fact that this merger occurs still leaves an enormous amount of opportunity for others to come in and participate. So our participation—or even as it attracts the participation of other large companies—is unlikely to change the competitive balance which has been a characteristic of this industry for decades, and this really doesn't change it.

Mr. Green. Thank you, Mr. Chairman.

Mr. Markey. If I could, Mr. Sullivan, I would like to recognize Mr. Butterfield, because he has to leave. He can't avoid it. By unanimous consent I will do that and then come back and recognize Mr. Sullivan and then Mr. Scalise in order.

The Chair recognizes the gentleman from North Carolina. Mr. BUTTERFIELD. Thank you very much, Mr. Chairman.

I thank Mr. Sullivan. I was due at a meeting on Haiti over in the Capitol about 30 minutes ago. Thank you very much.

Let me thank the two witnesses for your testimony today.

I want to particularly thank Mr. Tillerson for the work that he does with ExxonMobil. I have two credit cards in my pocket: One is American Express and the other is an ExxonMobil credit card. They are the only two credit cards that I own. You have an employee, Mr. Lonnie Johnson, who moved to Washington some months ago, and I shared that with him when he first got here. It

is a company that I am very fond of. So thank you for what you do.

I have in front of me a quote from Secretary Chu, Nobel Peace Prize winner, scientist, that he made several days ago. For fear of misquoting him, I want to read it verbatim and simply ask you

your comments on it.

He said the following: I think it can be done responsibly. And the EPA and other agencies will be looking to ensure that it is done safely and responsibly. If it can be extracted in an environmentally safe way, then why would you want to ban it? The question is, can you do this right so it doesn't leak into the water table? I think you can, the Secretary said. But he also said that if it's done wrong, that it presents substantial risk. Can you do it incorrectly and start to pollute the water tables? Yes, he said.

The Secretary said companies should not use fracking in a shale rock that is close to a water table or an unstable fault line. You don't want to be monkeying with shale that is very, very close to the water table, the Secretary said. There are a hundred ways to

mess this thing up.

Do you agree or—each of you, do you agree or disagree with the Secretary's assessment?

Mr. TILLERSON. Well, I think, you know, clearly it is a risk that we have to manage, and the expectation is that we manage it well.

And I don't know if you were in the room a moment ago or not, Congressman, but I commented on testimony that has been given to the Congress last June by the EPA, both from the results of a 4-year study they did in 2004, where they could not find a single documented case of groundwater contamination from hydraulic fracturing. To our knowledge, there have been a million wells fracked and no documented cases of contamination of groundwater from hydraulic fracturing.

In your places, along with some of these graphics, there is a graphic in there that tries to describe why that happens. It is not just by happenstance. It is a picture of how wells are designed. It looks like this.

And to Secretary Chu's comment that you don't want to frack near a freshwater zone, that is exactly correct. And we wouldn't want to fracture near freshwater zones, because if the fracture penetrates the freshwater zone, we haven't achieved what we spent the millions of dollars to do, which is frack the hydrocarbon zone.

This all starts with the well design. And when these wells were first drilled—and it was commented on by Congressman Doyle—State agencies already regulate how these wells will be drilled. And there are multiple layers of steel casing that protect the freshwater zones as the well is being drilled, just so we can simply get the well drilled. Those same steel casings then protect the freshwater zone during the hydraulic fracturing process.

during the hydraulic fracturing process.

My second assignment with ExxonMobil in 1976 was to design hydraulic fracturing procedures for a new type gas play in East Texas. And the number of people that are on the location during a fracture procedure, there is a large number. And a lot of those people are there to monitor the pressures on the formation and the various casing streams to ensure there is no failure of the protec-

tive structures that have been put in place. So it can be done safely; it has been done safely.

Mr. BUTTERFIELD. Well, tell me about diesel fuel. Is diesel fuel

used in the process?

Mr. TILLERSON. Diesel fuel can be used in some fracturing formulations. But, again, it is——

Mr. BUTTERFIELD. Does that enhance the risk of danger?

Mr. TILLERSON. No. The risk would be if you ruptured these multiple layers of casing and the fluid went where you didn't want it to go. But you have hundreds to thousands of feet of rock strata between the freshwater and the hydrocarbon-bearing shale, and then you have multiple layers of steel casing as well.

So it is a risk that we know we have to manage, and the wells have been designed over the last many decades to do just that. And

that is whv—

Mr. BUTTERFIELD. I am running out of time here. In managing that risk then, do you feel that the public has a right to know what chemicals are actually being pumped into the ground in their com-

munities and whether it is close to a drinking source?

Mr. TILLERSON. Well, we wouldn't object to any disclosure on the contents of what is in the frack fluid. And, in fact, today, on these locations, in order to comply with other regulations, there are material safety data sheets on chemicals that are on the location, so that if there is—and that is primarily if there is either a surface spill or an exposure to a human that could be harmed by the exposure, that those material safety data sheets are available so people know exactly what is on that site. So there is already some level of disclosure.

We understand the concern of some of the service providers who formulate the frack fluids that they are concerned about loss of competitive advantage. We would work with them and see if we couldn't find a way to accommodate fuller disclosure or full disclosure of the contents of the frack fluid. Based on our knowledge of what is in those fluids, there is nothing that gives us great concern, in the past or today.

Mr. Butterfield. I have run out of time. Mr. Simpson, we will see you next time.

Mr. SIMPSON. Thank you.

Mr. BUTTERFIELD. All right. I yield back.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Oklahoma, Mr. Sullivan.

Mr. SULLIVAN. Thank you, Mr. Chairman.

And I appreciate what you are saying, Mr. Tillerson. You have hit on everything I wanted to talk about, but I think it is so important that I want to discuss it again here real quick, if we could.

In regards to hydraulic fracking, it seems almost ludicrous that we are trying to do this. Like you said, over the past 60 years, not a single documented case of drinking water contamination has ever been credibly tied to hydraulic fracturing due to engineering or technical safeguards designed to protect groundwater. None. It has been going on for, like, 60 years.

Also, the energy recovered from hydraulic frack—and this just shows you important it is to the Nation's energy supply—accounts

for 30 percent of the U.S. recoverable oil and gas reserves and has added more than 7 billion barrels of oil and 600 trillion cubic feet of natural gas to the U.S. energy supply, showing you how important this is.

Also, like you stated too, Mr. Tillerson, a major EPA study—this is the EPA who wants to do this—a major study by the EPA completed in June of 2004 concluded that hydraulic fracturing does not—does not—pose any significant environmental risks. Yet we are trying to do this.

Also, you are right; you know, the States are the best people that are equipped to do this, to regulate this. They are the ones that know the players, they know the geology, they have been there before, they have seen it. It is the best way, instead of having another layer of bureaucracy, again, impeding on jobs. This is about jobs.

Also, I wanted to see if you guys could tell us what growth in the natural gas industry, especially in unconventional resources, means for jobs in the U.S.; what States and regions of the countries will have jobs created through ExxonMobil-XTO natural gas development and production. If you both could comment on that.

Mr. TILLERSON. I commented earlier on the growth that we expect natural gas to take here in the United States, about 20 percent. Half of power generation, we think, over the next 20 years is

going to be fired by natural gas.

And if you look at the profile of gas supply that we expect to come from the unconventional resources, that could lead to jobs. In excess of 300,000 jobs would be created over the next, you know, couple of decades to support that activity. And they would be created—and you can look at that map, and you can see where these basins fall. And so if you are in a State that the basin is under, you could expect to see activity in your State.

And I think it has been commented, in Pennsylvania, enormous job creation, 50,000 jobs in the last couple years. And we expect that to approach 100,000 jobs because of the activity in the Marcellus Shale; and a contribution to Pennsylvania's budget of \$8

billion out of the Marcellus Shale activity.

So it has both an enormous job-creation benefit as well as revenue benefits to local governments, State governments, and to the Federal Government.

Mr. SIMPSON. Yes, you know, I look at our direct employment, going from a handful of employees to 3,300. Our own personal growth there in Fort Worth tends to track, you know, the volume growth of the company. So our employment has been growing at 20 to 30 percent a year, directly of the individuals there.

We also generally run the second most drilling rigs in America in exploring and developing this resource, and that is many thousands of jobs directly as a result of this activity that we cause with our drilling activity, and that is also going to be growing. So in quantifying, you know, the job growth in the industry, it has been

enormous over the years. It is going to be more.

If you look at natural gas production in my career, you go back to when I began in 1976, natural gas production then did not grow in this country until recently. So the last 30 years, mostly it has been a struggle to maintain and offset decline and not to grow this resource. During the last 3 or 4 years is the first time in my career that I have seen you can actually grow this resource tremendously, leading to the benefits of both job and price and security for this Nation.

So, that is the testimony from a guy who lived it. We generally lived off the scraps of old fields most of my career. And the exciting thing about this development is we now have the largest fields in history being found. The Hugenon and San Juan were the two largest fields in America ever discovered prior to the advent of these shales. To give you an order of magnitude, they were discovered in the 1920s. The shale discoveries of today probably represents five times the resource base that they ever delivered. And they were the two largest fields in this Nation.

So it is not just replicating the past, it is reinventing the future. And so, along with that will come, you know, the job growth that is corollary to that. It is probably beyond the numbers we have talked about today, because they are far-reaching, including the marketplace, products and simulations that will be derived from the growth of this product.

Mr. Sullivan. And we appreciate the 200 jobs in Oklahoma, and

hopefully there will be more.

And, also, I was going to ask both of you, too, what does this merger signify, do you think, to the American people about natural gas as a fuel for the future? And what do you think the takeaway should be on this today that you would like to see the American people see? Because I think it is pretty exciting.

Mr. Markey. If you can both answer very briefly.

Mr. TILLERSON. I would just say it is a signal to the American people that we have an enormously valuable natural resource that can be delivered and can be delivered to provide them a new source of reliable, affordable energy

Mr. SIMPSON. Yes, I would say that, you know, the good news for America is we have a more secure energy supply at a lower cost for the foreseeable future, and an event in my career that hasn't

happened before.

Mr. Markey. Thank you very much.

The gentleman from Louisiana, Mr. Scalise, is recognized.

Mr. Scalise. Thank you, Mr. Chairman.

I have been out to Shreveport, where the Haynesville Shale play is really being run out of, and there is a lot of area out there; at the time, the largest natural gas find in the history of our country. And now we are finding more, as you have talked about, more finds in different parts of the country. Just last week, there was announced a tract of the Gulf Mexico, just off the coast of Louisiana, that they thought was completely dried up, where they found massive reserves of natural gas there as well.

So, you know, there are more natural gas and oil finds that we are coming up with as the technology advances. And I want to ask you both about the technology advancements, because it gets lost in the shuffle a lot. People talk as if the technologies of 20 years

ago were still being employed.

You know, I like to tell my colleagues that the best place to go fishing in the Gulf of Mexico is next to an oil rig because, number one, with the environmental safeguards that are in place, it is one of the best habitats for fish. They love congregating and thriving in that area. And the fishing captains know that because that is where they take people to go fishing. And you will catch some really good fish and some of the best eating you are going to find right there next to the oil rig. In fact, a motorboat riding around the Gulf of Mexico is going to leak more oil than a large offshore rig. And yet, you know, you listen to some of these people that want to limit the production of our country's natural resources, and they act as if those technological advances never occurred.

And so I want to get your take, first, on if Congress does do what I think would be very bad policy, not just on cap and trade but also on limits of fracking, what would that mean to the kinds of production that is going on right now in the United States? And if both

of you can answer.

Mr. TILLERSON. Well, I think as Mr. Simpson has alluded, in the unconventional area, if you cannot hydraulically fracture these wells, then you wouldn't drill them. So you would just stop at that point. Because you cannot commercially recover the gas that is trapped there. The same would be true for the emerging oil shale plays, like the Bakken in North Dakota, has to be fracture-stimulated.

And even beyond the unconventional plays, a lot of conventional wells utilize hydraulic fracturing to get the rates up to commercial level. It allows you to produce more and, therefore, improve the economics. So if you remove hydraulic fracturing as a technique, we don't have an alternative technique today that will achieve the same result from the wells.

We have a lot of technology tools, we bring them all together; that is what allows us to make these things economic. But there is not a replacement for hydraulic fracturing to achieve the same result in these types of resources.

Mr. Scalise. And any idea on the type of job losses our country

would experience if we weren't able to do that?

Mr. TILLERSON. Well, all of the job growth we have talked about would pretty well come to a halt, and then you would just allow the wells that are producing to decline and be depleted. So you clearly would cease job growth. And then there would be some, obviously, immediate effect on job losses, because you wouldn't drill the wells anymore if you couldn't fracture them. So all the employment that goes with drilling activity and to support that would immediately cease.

Now, you have a graphic in front of you that talks about the number of jobs the industry by and large creates, and a lot of those jobs would be under risk if there were some provision made that we could no longer utilize this technique or made it so costly that it didn't give you the economic results you needed.

Mr. SIMPSON. You know, one of the exciting things about the development of technology that you alluded to earlier and one of the exciting things about joining forces with Exxon for our company is

the prospect of further advances.

We generally only recover 30 or 40 percent of the hydrocarbons in place. And so these estimates of a 100-year supply are pretty well founded on those types of recoveries in the areas we are talking about. I believe in generations to come and years to come, that

recovery factor will increase, and so these reserves will be larger, and that will lead to further growth in the security of America.

And, also, companies such as ExxonMobil, I think, are the most likely, with the R&D they do and the resources they devote to it. I think that is, again, a partnership that we are joining in that is more likely to lead to that kind of technology than not. So that is a force they bring to this table.

But, again, it is not widely understood that when you talk about recovery of oil and gas, you are only talking about a small fraction

of what is in place. And that is to come for the future.

I have seen it advance in my career tremendously. We didn't know what horizontal drilling was in 1986 and we had never heard of it. And then the shales were kind of laughed at over the years, like, "Yes, there may be some gas there, but it is not economic."

And so the advancement that I have seen in this 30 years is tremendous, and there is room for that type of advancement into the future should the resources be deployed and you can continue to study it with active interest and talented people. And I think our organization has very talented and skilled people, and I think so does theirs. And the teaming of the two will lead to further innovation.

Mr. Scalise. I know that some of this debate has been brought up as a safety issue and trying to be couched in terms of water safety. And, of course, as you have pointed out and others on the committee have pointed out, there are many studies that have been done, and not one has suggested that there is any kind of threat to the water safety.

So this really has nothing to do with safety. It is about a policy decision we are going to make, and do we really want to utilize the resource that this country has and the ability that we have to make our country independent of especially Middle Eastern oil, countries that don't necessarily want to do good things with the money that they are getting to our country.

Where would exploration come from? Because our country still has a large appetite for energy consumption, and energy exploration is an international industry. Where would the natural gas come from if we weren't able to get it from the United States?

Mr. TILLERSON. Well, the current limited imports that the U.S. does have largely come from Canada by way of pipeline, and then through LNG imports as we have added capacity, receiving capacity, to access more of the LNG markets that are also growing globally. So it obviously would come from those two sources.

Mr. Scalise. And, obviously, as we talk about energy independence and those of us that want to have a comprehensive energy policy that allows us to break that dependence on Middle Eastern oil, these kind of radical policies would only increase our dependence on foreign oil. At a time when we should be doing the opposite and we should be creating jobs, this would run jobs off and make our country more dependent on foreign oil.

I will close on that and let you comment if you want.

Mr. SIMPSON. Yes, Congressman, I agree that there would be a further dependence on international markets. You know, the LNG is the competition for its price. It is going to be allocated, a lot of

it, towards the highest price in the world. To attract it here would

be price.

I would submit that, you know, a good example of where we are today, in the last decade I have seen natural gas spike to \$10 or \$15 several times, generally in relation to cold winters, such as we are having now. I look at gas today, it is a little over \$5. The energy equivalent on that, you multiply it times six, so you get \$30something a barrel versus the price of oil. So, clearly, natural gas is a relative bargain.

I think that bargain is being driven largely by supply, because it is a commodity. And, as to the price in the future, no one knows. I can just comment on my observation. I know we are having a cold winter, and I know I have seen it spike in the last decade several

times when we had cold weather.

This time, we had record supply going into this winter, almost four CTF. That is almost 20 percent of our demand in the ground ready for winter. So between that and the near-record production that we are experiencing from our own supply in America would be my submission as to why you are enjoying natural gas prices that are a fraction of what it would have been otherwise.

Mr. Scalise. Thank you, and I yield back.

Mr. Markey. The gentleman's time has expired.

The Chair recognizes the gentleman from Arizona, Mr. Shadegg.

Mr. Shadegg. Thank you, Mr. Chairman.

And thank you, gentleman, for being with us. I apologize that I wasn't able to stay for all of the answers to the questions that you provided. But I want to start, Mr. Simpson, by talking to you and asking you a question or at least making a comment.

First of all, I applaud you as an entrepreneur. I think the Nation

is better off for what you have been able to find and do.

Mr. SIMPSON. Thank you.

Mr. Shadegg. But I must tell you that when you told the story about the house that you had in Texas where you couldn't get natural gas to your home, yet it sits on one of the largest natural gas resources or fields we now know of, you then said, given that and given the realities of the natural gas we know is there and can now get out with today's technology, including hydraulic fracturing, you can't imagine—this is your statement—you said, "I can't imagine that the Congress would pass laws restricting us from getting to those resources."

Trust me, I find that statement stunningly politically naive, and I think there is a grave risk that the Congress might do that and that you need to be aware of that risk. And that is why it is in this agreement.

I have no problem with the government making rational decisions not to go after known resources if, in fact, they can't be brought out in an environmentally safe way. But I think it is im-

portant that that be an informed decision.

I believe you would tell me that if we ban hydraulic fracturing, either outright or through the unintended consequences of legislation we pass, then all of these numbers that we have been talking about—the 100-year supply, the reasonable price that you just talked about—you would tell me are gone. Is that correct?

Mr. SIMPSON. There is a risk they are gone.

Mr. Shadegg. Because I guess with all of these fields, the Barnett, Haynesville, Fayetteville, Marcellus, West Virginia, Ohio, and Woodford, with all of those we are dependent upon hydraulic fracturing to get to them, right?

Mr. SIMPSON. That is correct, Congressman.

Mr. Shadegg. So if we suddenly could not get to them, our domestic supply would drop precipitously?

Mr. SIMPSON. Perhaps a third.

Mr. Shadegg. And the price would go up accordingly?

Mr. SIMPSON. I believe that to be the case.

Mr. SHADEGG. Mr. Tillerson, I want to commend you for the thought of putting into the agreement the condition that it goes through only if the Congress doesn't specifically or by unintended consequences make hydraulic fracturing impossible. And the reason I want to commend you for doing that is, again, I have no problem with the American people making rational policy decisions to protect the environment, but that requires an informed electorate. And I think one of the things we have done in this country is we have made natural resource decisions on oil and gas without the public having any idea.

For example, I think the American public believes today that we are drilling offshore, that we have now opened up some of the areas of American offshore for drilling as a result of the spike in energy prices roughly 2 years ago. Guess what? That is completely false. And I think you know that. You know that technically they opened those lands up, but even where leases have been issued, lawsuits have been filed and there is no exploration or production

If the American people believe that we are going after our resources but, in fact, we are not, they can't make a rational decision. And I think when they don't know that the Government is adopting policies which are costing them jobs or driving the cost of their energy through the roof, then they cannot make a rational decision.

And I would bet that there are thousands of ExxonMobil stockholders who, if they study this deal and are aware of it and look at it and say, wow, what is that, why did we put that in, and you say to them what you said to us, well, we had to put it in because the Congress might do something like that, the Congress seems to love to regulate just for the fun of regulating, often when there is no benefit to the regulation, if they figure that out, then maybe they will decide to get politically active and at least make the debate on the inside here be a rational one based on facts.

And I guess my question of you is, do you agree that if we pursue policies that prohibit hydraulic fracturing, it will have a devastating impact on the price of energy and on jobs in the U.S.?

Mr. TILLERSON. Yes. If you pursue a hydraulic fracturing policy or any policies that restrict access to the natural resources of the country, it has a detrimental effect.

Mr. Shadegg. And you would agree with me, for example, that there is no meaningful leasing or no meaningful production going on offshore in America today because of either current policies or lawsuits in place following the repeal of some of those policies?

Mr. TILLERSON. We are approaching what is likely to be the low-

est level of leasing activity in many, many years.

Mr. Shadegg. And the Americans are paying a huge price for that?

Mr. TILLERSON. Well, we certainly could have a lot more domestic resource development activity and production than we have

today if that access were granted.

Mr. Shadegg. I will conclude with this. As a general proposition, do you think that we do a more environmentally sensitive job of removing natural resources from the Earth, or at least as sensitive, as the other countries around the world?

Mr. TILLERSON. Well, the U.S., by and large, is the standard bearer because of the history of the industry here, the evolution of the industry, and the regulatory environment, much of which has been very helpful to setting standards elsewhere in the world.

So I think your observation I would agree with, that I don't think you will find a more rigorous regulatory environment around our

industry anywhere else in the world.

Mr. Shadegg. Thank you.

Mr. Markey. Great. The gentleman's time has expired.

All time for questions from subcommittee members has expired, which allows us to then recognize the gentlelady from Colorado, Ms. DeGette, who, by unanimous consent, has been granted 5 minutes to ask questions of the panel.

Ms. DEGETTE. Thank you so much, Mr. Chairman.

Thank you again, both of you gentlemen, for coming today.

Mr. Tillerson, you testified in response to a couple of questions ago that at least ExxonMobil doesn't object to disclosing what is in fracking fluid, correct?

Mr. TILLERSON. That is correct.
Ms. DEGETTE. Would that be also your position, Mr. Simpson?

Mr. SIMPSON. It would be, Congresswoman.

Ms. Degette. And recognizing that in my legislation and also in my opinion I don't think that the proprietary chemical formula should have to be disclosed unless there is some emergency, I would assume that would be both of you gentlemen's positions as well.

Mr. Tillerson, you wouldn't want the proprietary information disclosed.

Mr. TILLERSON. That is correct.

Ms. Degette. And, Mr. Simpson, would that be correct?

Mr. SIMPSON. That is correct.

Ms. DEGETTE. Now, that is good news to me, because that is all my bill does. And I see my friend from Arizona has left, but, as I said in my opening statement, I have absolutely no intention of outlawing fracking. In fact, I think fracking is important to get a lot of these reserves out of the ground.

And I think, Mr. Tillerson, you testified earlier that fracking has been around for 60 years. But I think you would agree with me that it has been in about the last 10 years or so that it has been used a lot more than it had been because of the necessity of getting some difficult natural gas out of the ground. Correct?

Mr. TILLERSON. Well, no, I don't—I don't know.

Ms. DEGETTE. You don't agree with that?

Mr. TILLERSON. I would have to look, because there were periods of times in the 1970sMs. DEGETTE. That it was used.

Mr. TILLERSON [continuing]. That hydraulic fracturing was used extensively to develop tight gas reservoirs and tight oil reservoirs. So there have been periodic times of higher or lower activity.

Ms. DEGETTE. OK. But it is being used a lot more now, correct? Mr. TILLERSON. It is being used extensively in these unconven-

tional plays.

Ms. DeGette. OK. Now, you testified that it is your belief—and I think also, Mr. Simpson, you agreed—that you believe State regulations are the best way to monitor fracking activities across the 50 States, correct?

Mr. TILLERSON. Correct.

Ms. DEGETTE. Are you aware that only four States have laws specifically directed at hydraulic fracturing? Yes or no?

Mr. TILLERSON. Some States where these plays are emerging are

putting in place their regulatory structure.

Ms. DeGette. OK. But right now only four States have it, correct?

Mr. TILLERSON. And they can look to other States for guidance.

Ms. DEGETTE. Yes or no, sir?

Mr. TILLERSON. Well, I don't—I would have to look—

Ms. DEGETTE. You don't know. OK. Is it your position—

Mr. TILLERSON. I acknowledge that some States have a more mature regulatory structure around this area than others.

Ms. DEGETTE. OK. Thank you. I apologize; I only have a few minutes.

But it would be your position, I would assume then, that the rest of the States that don't have specific hydraulic fracturing statutes have other laws that might implicate this, correct?

Mr. TILLERSON. They have other laws that would govern certain

aspects of it, yes.

Ms. DEGETTE. OK. So my question is, for your company, ExxonMobil, how much money does your company spend on complying with the regulatory processes of the 50 States every year?

Mr. TILLERSON. I would have to get you that number.

Ms. DEGETTE. Would you be willing to do that?

Mr. TILLERSON. I will see if we can get you something.

Ms. DEGETTE. Mr. Chairman, I ask unanimous consent that the gentleman be allowed to supplement his statement with that information.

Mr. Markey. Without objection.

Ms. DEGETTE. And, Mr. Simpson, how much does your company spend annually complying with these different 50 State laws on disclosure?

Mr. SIMPSON. I would need to get that specific number.

Ms. DEGETTE. And would you be willing to do that, as well, sir?

Mr. SIMPSON. I would.

Ms. DEGETTE. Thank you very much. I appreciate that.

And here is my next question. Is it your view then, Mr. Tillerson, since you are willing to have the components of fracking fluid disclosed, but you do not want to see that happen under the Safe Drinking Water Act. Would that be your testimony today?

Mr. TILLERSON. That is correct.

Ms. DEGETTE. And would it be your view because that would be an additional regulatory hurdle that you would have to jump through?

Mr. TILLERSON. It is because the devil is always in the details.

And when you turn this over to the EPA-

Ms. DeGette. OK. Because it would be an additional regulatory hurdle? I mean, what does that mean, the devil is in the details?

Mr. TILLERSON. Well, it means I don't know how the EPA is going to enact or implement the regulation that you are promoting in your bill.

Ms. Degette. All it says, sir, is that—

Mr. TILLERSON. I take this, being a very secure person, that "all it says is," but I have dealt with the EPA-

Ms. DeGette. Sir, can I ask the question, please?

If your company has to report the fracking materials to the EPA under the Safe Drinking Water Act, just like every other person who puts things into the ground, how much more would it cost your company every year in regulatory compliance?

Mr. TILLERSON. I do not know, because I don't know how the reg-

ulation is going to be written, nor do you.

Ms. DEGETTE. OK. And, therefore, can you say today whether or not simply reporting the components, which you agree should be reported under the Safe Drinking Water Act, would make it commercially impracticable?

Mr. TILLERSON. I do not know. Ms. Degette. You do not know.

And what about you, Mr. Simpson? Do you know?

Mr. SIMPSON. I do not know either.

Ms. DEGETTE. And has anybody told you how much more it would cost to report it under the Safe Drinking Water Act versus 50 different State laws?

Mr. SIMPSON. No one has told me.

Ms. DEGETTE. And have they told you, Mr. Tillerson?

Mr. TILLERSON. No.

Ms. Degette. Thank you. I have no further questions.

Mr. Markey. OK. The gentlelady's time has expired, and all time

for this hearing has expired as well.

You know, my favorite show when I was a kid was "Rocky and Bullwinkle." And they used to have this segment once a week where Mr. Peabody, who was kind of a scientist type, would take this little boy, Sherman, into the WABAC Machine to study fractured history.

And that is a little bit like what this hearing is like to me. Because, in 1978, we sat in this room, we had a big hearing, I was on the subcommittee. America was running out of natural gas. We had a natural gas crisis. This is the testimony coming from the natural gas industry to the committee. "It is too precious of a resource to actually be used in the generation of electricity." That is where we were in 1978, listening to the natural gas industry.

So it is a bit of a fractured history here, now that the O. Henry ending is that we probably have 2-1/2 to three times more natural gas than we have oil, that it has half the carbon emissions of coal in electrical generation, and that it is in areas of the country where

it is going to be most needed. So it is very interesting.

But even as I was listening here over and over again in the hearing, it is continually heard that there might be some secret conspiracy on this side of the aisle to ban hydraulic fracturing. But I just want to say that that would be fracturing reality in the same way that Mr. Peabody and Sherman used to fracture it by taking Sherman back in the WABAC Machine.

So I just want to again make that clear. There is no secret plot to do that. There is a goal, to make sure that it is used safely and with sound environmental regulations, but I haven't heard from either of the witnesses today that they oppose those goals. How we achieve them might be something we continue to discuss, and Congresswoman DeGette is raising that. But I just want to once again say there is no secret plot here to ban hydraulic fracturing, given the fact that there have been 1 million wells, I heard, that have been drilled using that technique.

I think what we heard here today is that ExxonMobil is putting down a \$41 billion bet on what America's energy future will be and that it is moving in a low-carbon direction. And I think that is a smart bet on the part of ExxonMobil. And I appreciate Mr. Tillerson's testimony that humans do contribute to global warming. He doesn't yet know what percentage, but yet it does play a role. And I appreciate that, because that helps us in terms of moving forward with policies to that do promote low-carbon futures, because I think that helps to push us in the correct direction.

I think, as well, it helps us to invest in America, create jobs here in our country, and to create an environment where we do develop strategies to back out that imported oil, to back out the sources of energy that do pollute more within our economy. And I think that if Waxman-Markey is adopted, that it will telescope the time frame that it takes for us to move to an era where we have exploited all of these opportunities which natural gas are presenting to our country. And my hope is that we can move in that direction.

So we thank you for your testimony. We look forward to the results of the study of the safety components of the techniques that are used in hydraulic fracturing that the Congress has urged the EPA to undertake, but that only helps us to better put together a comprehensive policy here in our country.

So, with the thanks of the subcommittee, Mr. Tillerson, Mr. Simpson, this hearing is adjourned. Thank you.

[Whereupon, at 1:05 p.m., the subcommittee was adjourned.] [Material submitted for inclusion in the record follows:]



Evaluation of Impacts to Underground Sources of Drinking Water by Hydraulic Fracturing of Coalbed Methane Reservoirs; National Study Final Report

#### Summary

EPA has published a final report summarizing a study to evaluate the potential threat to underground sources of drinking water (USDWs) from the injection of hydraulic fracturing fluids into coalbed methane (CBM) production wells. As in its August 2002 draft report, EPA has concluded that additional or further study is not warranted at this time. In making this decision, EPA reviewed more than 200 peer-reviewed publications, other research, and public comments. The Agency has concluded that the injection of hydraulic fracturing fluids into CBM wells poses minimal threat to USDWs.

In its review of incidents of drinking water well contamination believed to be associated with hydraulic fracturing, EPA found no confirmed cases that are linked to fracturing fluid injection into CBM wells or subsequent underground movement of fracturing fluids. Further, although thousands of CBM wells are fractured annually, EPA did not find confirmed evidence that drinking water wells have been contaminated by hydraulic fracturing fluid injection into CBM wells. Where fluids are injected, EPA believes that groundwater production, combined with mitigating effects of dilution and dispersion, adsorption, and biodegradation, minimize the possibility that chemicals included in fracturing fluids would adversely affect USDWs.

In the course of conducting the study, EPA found that diesel fuel, which may pose some environmental concerns, was sometimes used in fluids for hydraulic fracturing within USDWs. To address any environmental concerns, EPA worked with the three service companies that perform 95% of the hydraulic fracturing projects in the U.S. to voluntarily remove diesel fuel from CBM fracturing fluids injected into USDWs. The three companies agreed and signed a Memorandum of Agreement (MOA) to that effect in December 2003.

#### Background

Coalbed methane is a gas contained in varying quantities within all coal. Hydraulic fracturing of production wells is technology that has been used for more than 50 years in conventional oil and gas production to enhance recovery by enlarging fractures through which oil and gas, including CBM, can be drawn to a well and pumped to the surface. Water-based fluids have become the predominant type of CBM fracturing fluids; although fluids can also be based on oil, methanol, or a combination of water and methanol. After fluids are injected to expand fractures within a coal seam, large quantities of ground water and some of the injecting fracturing fluids are pumped out of the well to facilitate the production of CBM. Additional technical information on the practice of hydraulic fracturing can be found in the final report.

In 1997, in *LEAF v. EPA*, the Eleventh Circuit Court ruled that, because hydraulic fracturing of coalbeds to produce methane gas is a form of underground injection, Alabama's EPA-approved underground injection control (UIC) program must effectively regulate this practice. In response to the Eleventh Circuit's decision, citizen complaints, and Congressional interest, EPA made the determination to investigate the potential for hydraulic fracturing of CBM wells to contaminate USDWs.

In addition to reviewing more than 200 peer-reviewed publications, EPA also interviewed 50 employees from state or local government agencies and communicated with approximately 40 citizens who were concerned that CBM production impacted their drinking water wells. EPA made a draft of the report available for a 60-day public comment period in August 2002. Comments received from more than 100 commentors, including private citizens, environmental and citizen groups, government agencies, oil and gas companies, and trade associations, have been summarized in a Response to Comments document that is available on the EPA website.

# For More Information

The final report and a Response to Comments document can be found on the EPA website at <a href="http://www.epa.gov/safewater/uic/cbmstudy.html">http://www.epa.gov/safewater/uic/cbmstudy.html</a>. The Memorandum of Agreement to remove diesel fuel from hydraulic fracturing fluids and general information about the UIC program are available at <a href="http://www.epa.gov/safewater/uic.html">http://www.epa.gov/safewater/uic.html</a>.

#### **Environmental and Public Health Benefits**

This notice does not impose any new regulations, information collection, or record-keeping burden on the public or other entities. The publication of the final report will not change the environmental or public health benefits of the UIC program.

Office of Water (4606M) EPA 816-F-04-017 June 2004 www.epa.gov/safewater

# Congress of the United States House of Representatives Washington, DC 20515

December 15, 2009

The Honorable Lisa Jackson Administrator U.S. Environmental Protection Agency Ariel Rios Federal Building 1200 Pennsylvania Avenue, N.W. Room 300 Washington, DC 20460

# Dear Administrator Jackson:

The Department of the Interior, Environment, and Related Agencies Appropriations Act for Fiscal Year 2010, signed into law on October 30, 2009, contains funding for carrying out the Environmental Protection Agency's (EPA) critical mission to protect human health and the environment. Pursuant to that mission, the conference committee's report requested that the EPA conduct a study of hydraulic fracturing.

Specifically, the report states that the EPA is to "carry out a study of the relationship between hydraulic fracturing and drinking water, using a credible approach that relies on the best available science, as well as independent sources of information." We believe that this study should use a systematic, scientific approach that ensures transparency, accuracy and validity, so as to allow the EPA and Congress to properly evaluate the environmental performance of hydraulic fracturing.

We recommend that the EPA follow several key criteria. First, the study should rely on accepted quality assurance guidelines. The EPA should develop a reasonable and transparent study design consistent with its 2004 study and have the results properly peer-reviewed by qualified experts in accordance with standard practices. The study should also draw on the knowledge and experience of experts in hydraulic fracturing, including those in the Department of Energy, the U.S. Geological Survey, and state regulatory agencies. The EPA should make the study's results available to interested members of the public for review and comment prior to finalizing them.

Second, the EPA should fully take into account previous studies on hydraulic fracturing by federal or state governmental agencies, councils, commissions or advisory committees. For example, given the significant effort associated with the 2004 EPA study, the agency should consider that study's conclusions on hydraulic fracturing and utilize a phased approach when determining whether additional review is warranted.

Last and most importantly, the study should be based on well-recognized principles of risk assessment to determine whether individuals are exposed to substances in the hydraulic fracturing process at levels considered harmful to human health.

Thank you for your consideration and we look forward to working with you to develop America's energy resources in the most environmentally-sound manner possible.

Sincerely.

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## Cc:

The Honorable Gene Green

The Honorable Dan Boren

The Honorable Chet Edwards

The Honorable Solomon Ortiz

The Honorable Charlie Gonzalez

The Honorable Ruben Hinojosa

The Honorable Al Green

The Honorable Silvestre Reyes

The Honorable Eddie Bernice Johnson

The Honorable Charlie Melancon

The Honorable Henry Cuellar

The Honorable Mike Ross

The Honorable Shelia Jackson Lee

The Honorable Jim Matheson

The Honorable Ciro Rodriguez

The Honorable Harry Teague

The Honorable Earl Pomeroy

The Honorable Martin Heinrich

The Honorable Parker Griffith

The Honorable John Tanner

The Honorable Jim Costa

The Honorable Walt Minnick

Therese M. Fariello Vice President Washington Office

March 5, 2010

The Honorable Henry A. Waxman Chairman House Committee on Energy and Commerce 2125 Rayburn House Office Building Washington, DC 20515-6115

Dear Congressman Waxman:

Enclosed please find our company's responses to questions posed by members following the January 20, 2010 hearing of the House Subcommittee on Energy and Environment, entitled "The ExxonMobil-XTO Merger: Impacts on U.S. Energy Markets."

Thank you and Subcommittee Chairman Markey for the opportunity to participate in the hearing and provide you with our views.

Sincerely,

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Enclosures

EXXONMOBIL'S RESPONSE TO POST-HEARING QUESTIONS SUBCOMMITTEE ON ENERGY AND ENVIRONMENT COMMITTEE ON ENERGY AND COMMERCE U.S. HOUSE OF REPRESENTATIVES JANUARY 10, 2010 HEARING "THE EXXONMOBIL-XTO MERGER: IMPACTS ON U.S. ENERGY MARKETS"

(1) One analyst noted that the ExxonMobil-XTO merger would bring together very different business models: the smaller player that must constantly drill and reinvest for the short-term business play; and the larger player that focuses instead on long-term, efficient assets. Another analyst noted that it may be difficult for Exxon to retain XTO's talented workforce due to Exxon's larger, more bureaucratic organization.

How would you respond to these observations, and how will you integrate both the business models and workforces of ExxonMobil and XTO for a successful merger?

**Answer:** ExxonMobil concurs in the view that the proposed merger with XTO would summon complementary strengths of both companies. The proposal is now pending before federal agencies, the Netherlands Competition Authority, and XTO's shareholders for approval.

As Mr. Tillerson stated on December 14, 2009, the day the proposed merger was announced:

We are pleased that ExxonMobil and XTO have reached this agreement. XTO is a leading U.S. unconventional natural gas producer, with an outstanding resource base, strong technical expertise and highly skilled employees. XTO's strengths, together with ExxonMobil's advanced R&D and operational capabilities, global scale and financial capacity, should enable development of additional supplies of unconventional oil and gas resources, benefiting consumers both here in the United States and around the world.

He also said that the agreement is good news for the United States economy and energy security, as it will enhance opportunities for job creation and investment in the production of America's own clean-burning natural gas resources. XTO's resource base is the equivalent of 45 trillion cubic feet of gas and includes shale gas, tight gas, coal bed methane and shale oil. These will complement ExxonMobil's holdings in the United States, Canada, Germany, Poland, and Argentina. Mr. Tillerson also said that the agreement is part of an ongoing, disciplined evaluation of timely investment opportunities to create value for shareholders, and to help meet long-term global energy demand growth. The agreement is consistent with ExxonMobil's business model which is focused on sustainable, long-term value creation.

Following the transaction closing, ExxonMobil intends to establish a new upstream organization to manage global development and production of unconventional resources, enabling the rapid development and deployment of technologies and operating practices to increase production and maximize resource value. The new organization will be located in Fort Worth, Texas, in XTO's current offices.

Mr. Simpson, chairman and founder of XTO, said that over the company's 23-year history, XTO has developed technical expertise and has assembled a substantial, high-quality and diverse resource base in producing basins across the United States:

XTO has a proven ability to profitably and consistently grow production and reserves in unconventional resources. As the world's leading energy company, ExxonMobil will build on our success and open new opportunities for the development of natural gas and oil resources on a global basis.

Mr. Tillerson again stressed each company's respective strengths in support of the proposed merger in his January 20 hearing statement and during the hearing itself.

For further information concerning the rationale for this merger, including the respective strengths of each company and how they could complement each other. ExxonMobil has filed a number of documents with the U.S. Securities and Exchange Commission, including several Forms 425. "Filing of certain prospectuses and communications in connection with business combination transactions" (filed on December 14 and 15, 2009. respectively) and Form 8-K, "Report of unscheduled material events or corporate event" (filed on December 14, 2009). These regulatory submissions can be found at http://ifi.exxonmobil.com/phoenix.zhtml?c=115024&p=irol-sec.

(2) I believe that natural gas is an essential bridge fuel to help meet our clean energy and climate goals, particularly if Congress or the Administration place limits or a cost on carbon emissions. Not only does gas have significantly less emissions than coal or oil, gas is needed to make many clean energy products such as wind turbines or to serve as back-up power for intermittent renewable energy sources.

What type of policies do you believe are essential to ensure that natural gas is promoted, and not hindered, under any clean energy or carbon reduction program?

Answer: The United States faces a number of priority challenges, including growing the economy (and increasing investment and jobs), increasing energy supplies and security, and improving energy efficiency and environmental performance. These challenges extend as well to the global community. There is not one energy challenge, but instead there are multiple energy challenges. ExxonMobil supports pursuing an integrated set of solutions – solutions that, when taken together, and over the long term, will help develop

new supplies of energy from all economic sources, accelerate gains in efficient energy use, and develop and deploy new technologies to curb greenhouse gas (and other) emissions. An expanded role for natural gas — domestically and globally — will be essential

While no single energy source available today can completely solve the dual challenge of meeting growing energy needs while reducing emissions, natural gas will be one of the most important fuels of the future because of its scalability, affordability, versatility and efficiency. Natural gas is an abundant, low-carbon energy resource available to power economic growth today and tomorrow. It currently offers the lowest-cost, cleaner-burning and large-scale alternative for power generation, reducing  $\mathrm{CO}_2$  emissions by up to 60 percent versus coal, while also substantially reducing sulfur dioxide, nitrogen oxide, particulate and mercury emissions. With its abundance and environmental advantages, it is expected to be the fastest growing major energy source globally over the coming decades – increasing by more than 50 percent worldwide from 2005 to 2030. By then, natural gas is projected to have overtaken coal as the world's second-biggest source of energy.

Natural gas will be especially important to power generation. Today, power generation accounts for about 35 percent of the world's total energy usage, and is expected to account for about 55 percent of the increase in global energy needs from 2005 to 2030 — reaching a total share of about 40 percent. In the Asia Pacific region alone, energy for power generation will approximately double from 2005 to 2030.

In contrast, the potential for the use of natural gas as a transportation fuel is limited. The Energy Information Administration's 2009 Annual Energy Outlook outlines the challenges associated with broadening the use of natural gas as a transportation fuel, concluding that the "...widespread adoption of natural gas vehicles in the United States is unlikely." The EIA cited a range of "significant hurdles" which render it generally impractical. For example, natural gas has three to four times less energy per gallon than gasoline or diesel fuels and must be kept under very high pressure, requiring costly and heavy fuel tanks. This explains, in part, why the natural gas fuel option has been available for over one hundred years but has not gained popularity with consumers. An additional, fundamental cost challenge would be to construct a national transportation and service-station infrastructure to accommodate high-pressure fueling for natural gas vehicles. In short, for the next several decades, we are projecting that oil will continue to predominate in meeting both U.S. and world transportation fuel needs (comprising 91 percent of U.S. transportation demand in 2030, and 94 percent globally).

The U.S. natural gas resource base (including Alaska gas) provides about a century of supply at current rates of consumption, with existing technology. According to the EIA, close to 25 percent of the energy demand in the U.S. is met by natural gas. About half of the homes in the U.S. — over 60 million — rely on natural gas as a primary source of energy. Natural gas-fired generation provides more than 20 percent of America's electricity needs, while approximately 45 percent comes from coal. But in some of our largest states, such as CA and TX, natural gas-fired power generation provides nearly 50 percent of the electricity consumed. Importantly, between 2005 and 2030, we expect U.S. natural gas demand to increase over 20% to approximately 75 billion cubic feet per day; natural gas consumed for power generation is expected to nearly double.

For years the energy industry has known that the North American continent holds vast quantities of so-called "unconventional" gas (for example, shale gas and tight gas). Over the last decade, however, advances across a whole range of technologies have made the economic production of these resources possible. The EIA's recently-issued preliminary 2010 Annual Energy Outlook estimates that technically-recoverable shale gas resources have increased by 30 percent in the past year alone, from 267 trillion cubic feet ("Tof") in 2009 to 347 Tcf now. U.S. unconventional gas production is expected to increase substantially and satisfy more than 50 percent of U.S. gas demand by 2030.

In evaluating policy options for reducing greenhouse gas (GHG) emissions, and under which natural gas would compete alongside other potential energy sources, ExxonMobil supports the following principles:

- ensuring any cost of GHG emissions is uniform across the economy and predictable;
- o allowing market prices to drive the selection of solutions;
- o minimizing complexity to reduce administrative costs;
- o maximizing transparency to companies and consumers;
- promoting global participation;
  - recognizing the priorities of the developing world:
  - limiting the consequences of differing national policies on competitiveness; and
- adjusting in the future to developments in climate science and the economic impacts of climate policies.

Effective climate and energy policy should promote innovation, encourage competition, set goals and provide a stable, sensible and predictable framework for entrepreneurs and innovative thinkers to achieve these goals. Establishing a "level playing field" in various constructs for meeting growing energy needs while reducing emissions would be foundational for achieving broad policy goals most cost-effectively. To stimulate new investments at the lowest cost to society, we need reliable, open markets and investment frameworks that consider and allow unbiased use of all economic alternatives to reduce GHG emissions. This means avoiding arbitrary mandates and preferences that prevent use of the most economic options or unfairly disadvantage (or discriminate against) an otherwise economic energy resource or technology.

Both in its allocation of permits under the proposed cap and trade system and establishment of a "renewable electricity standard," federal legislation advancing in both the House and Senate last year did not safeguard the "level playing field" principle to drive cost-efficiencies in fuel selection. Moreover, federal power-related subsidies are already heavily skewed. As reported by the U.S. Energy Information Administration, "electricity production subsidies and support per unit of production (dollars per megawatt hour) vary widely by fuel: Coal-based synfuels (refined coal) that are eligible for the alternative fuels tax credit, solar power, and wind power receive, by far, the highest subsidies per unit of generation, ranging from more than \$23 to nearly \$30 per megawatt hour of generation." See, Energy Information Administration (Office of Coal, Nuclear, Electric and Alternative Fuels), "Federal Financial Interventions and Subsidies in Energy Markets 2007." p. xv. (April 2008). These substantial subsidies significantly distort markets and preclude other options — such as natural gas — from contributing optimally to the achievement of our overall economic, energy

security and environmental goals. With a level playing field, natural gas, because of its scalability and environmental advantages, can provide immediate and long-term, cost-effective environmental benefits.

Finally, a meaningful benefit of policies that allow for a greater contribution of natural gas to meet our energy needs is that investments to increase U.S. production will create new jobs. Supported by stable and sensible investment frameworks, they would also provide a significant new source of government taxes and royalties. In this time of economic challenge, the U.S. oil and natural gas industry is working to re-ignite growth as quickly as possible. According to an analysis by IHS Global Insight, the natural gas industry supported more than 2.8 million jobs in the United States in 2008 (including over 620,000 direct jobs) and jobs in the industry have increased by 20 percent since 2006. Significant job growth occurred in many states, including Arkansas. Colorado, North Dakota, South Dakota, Utah and Pennsylvania. The economic impact of the industry is notable as well with natural gas contributing \$385 billion to our nation's economy in 2008 alone. ExxonMobil is poised to participate fully in these trends for new job creation in the U.S. natural gas industry.

(3) An ExxonMobil-XTO merger would hold nearly 8 million total acres in unconventional resources, nearly 60 percent of which would be located elsewhere such as in Canada, Argentina, Germany, Poland and Hungary. Can you briefly compare the regulatory programs and tax policies for developing these unconventional resources in the U.S. and abroad and how do these regulations impact where ExxonMobil makes its investments?

Answer: The international Energy Agency (IEA) predicts that the world's total energy demand will be significantly higher, as much as 40 percent higher, in 2030 than it was in 2007 — even considering the current global economic downturn. To meet the enormous and growing demand for energy, the industry must operate at a vast scale — and over a long time horizon. Time related to major investments in the oil and natural gas industry is not measured in business cycles; it is measured in generations. The energy we use today is the product of investment decisions and technical work that were undertaken many years or even decades ago. Sound government policies have played an important role

The IEA also now estimates that the cumulative investment in global energy-supply infrastructure needed to the year 2030 will exceed \$25 trillion (over period 2008–2030). Such investments will only be made, however, if governments establish stable and sensible fiscal and regulatory frameworks based on free market principles. To the extent that the world's nations and regions embrace such policies, they will more likely attract the investments needed to safeguard their long-term energy security and economic aspirations.

The energy industry — and the global economy — will need governments to encourage free trade, uphold the rule of law and build the sensible tax, legal, and regulatory frameworks that allow for long-term planning and investment to take place. Businesses

and governments must work to build energy policies that maximize the use of markets and allow market prices to drive the selection of solutions. Within ExxonMobil, we are demonstrating our commitment and endurance by pursuing plans to invest \$25 billion to \$30 billion annually over the next five years on energy projects. These are record investment levels for us. Whether to proceed to invest in the development of individual projects entails careful analyses of many factors, including risked resource potential, technical challenges and local costs, as well as the policy foundations, fiscal regimes, regulatory frameworks, and investment stability of host nations.

A specific aspect of your question concerns the impact of varying national tax regimes on the investments we make. Stable tax and regulatory policies that provide for competition on a level playing field play a significant role in the development of resources, both conventional and unconventional. Current tax rules in the United States, most of which have been in place and relied upon for many years in making energy investment and development decisions, have to date largely met the test of stability and have not discouraged investment. However, proposals to change these provisions adversely would, if adopted, be counterproductive and result in certain development projects not being undertaken.

ExxonMobil is clearly committed to the development of the non-conventional resource base in the U.S. currently owned by XTO. In fact, the financial strength that ExxonMobil brings to the merger provides the opportunity for even more rapid development of these U.S.-based resources, creating the opportunity for more jobs and investment in the production of cleaner-burning natural gas spread across many parts of the U.S. Again, however, adverse tax or regulatory changes that materially change the current rules would jeopardize these opportunities.

Similar considerations to those described above apply wherever ExxonMobil has resource development opportunities, including in the specific countries listed in the question. While each country listed has its own specific set of tax rules, as a general matter their rules do not appear to be less favorable for natural gas exploration and development, and in some cases, the generally applicable rates of tax are significantly better than the current U.S. rates.

ExxonMobil is also committed to development of its non-conventional resources outside the U.S. where the economics are viable and our financial capacity generally permits the development of all viable projects, both within and outside the U.S. We have a successful history of working with governments and partners around the world to help deliver the most value from hydrocarbon resources. By bringing together expert people, proprietary technology and superior operations and project management capability, we deliver on our pledge of performance.

(4) What is the annual cost to your company of complying with existing state laws regulating hydraulic fracturing?

**Answer:** ExxonMobil's Environmental Policy clearly states that we will "comply with all applicable laws and regulations and apply responsible standards where laws do not exist," including regulations and precautions specific to hydraulic fracturing.

Hydraulic fracturing is highly regulated at the state level to effectively protect drinking water wells and groundwater aquifers. In 2009, the Groundwater Protection Council surveyed the regulatory frameworks of 27 states, representing 99.9% of U.S. oil and natural gas production, and concluded "state regulations are adequately designed to directly protect water resources." More recently, EPA's Drinking Water Protection Division Director noted that state regulators are doing a good job overseeing hydraulic fracturing and there is no evidence the process causes water contamination.

Compliance costs for natural gas drilling and development, including hydraulic fracturing are the result of a multitude of requirements and industry best practices associated with well design, casing integrity, water handling, effluent disposal and other environmental measures. The costs of complying with any specific regulations are difficult to separate from the overall costs for sound operations consistent with regulatory requirements and industry best practices. However, in 2009, ExxonMobil reported that it spent over \$5 billion on environmental measures, which included compliance and protection expenditures for air, water, waste, spills, remediation and other environmental areas.

As indicated during the hearing, the costs for additional regulations are very dependent on the specific details of those new regulations. In July 2009, IHS Global Insight released a report that estimated the economic and jobs impacts in the U.S. under three potential regulatory scenarios: "Measuring the Economic and Energy Impacts of Proposals to Regulate Hydraulic Fracturing." The study found that "the effects of any policy will be substantial in the short-term and will increase in the long-term due to the increasing importance of unconventional plays in natural gas production." For example, in its least restrictive regulatory scenario, the study found that in the U.S. in 2014, "real GDP is \$84 billion lower than the reference case, and there are 635,000 fewer jobs." IHS Global Insight also provided state-by-state analyses of its findings. Some of the states that would confront the biggest losses of output and jobs on a percentage basis include Oklahoma, West Virginia, Louisiana, Texas, and Colorado.

The IHS Global Insight studies are enclosed for the record.



Bob R. Simpson Chairman of the Board and Founder

March 5, 2010

Honorable Diana DeGette United States House of Representatives 2421 Rayburn House Office Building Washington, D.C. 20515

Dear Congresswoman DeGette:

Recently, Chairman Henry Waxman of the House Committee on Energy & Commerce forwarded to me a question you submitted as a follow-up to my appearance before the House Subcomittee on Energy & Environment. My testimony was part of the hearing, "The ExxonMobil – XTO Merger: Impacts on U.S. Energy Markets." I appreciate your interest and hope the following response is helpful:

"What is the annual cost to your company of complying with state laws regulating hydraulic fracturing?"

There are a number of state regulations which apply to the process of hydraulic fracturing. Before the process begins, regulations dictate the construction of pits designed to hold fresh water for fracturing. Sediment control, pit liners, dam specifications and stormwater run-off control measures are a few of the regulated details involved in pit construction. In other cases, where such a pit is not feasible or permitted, fracturing fluids are contained in steel tanks.

Well construction involves a number of regulated practices which isolate underground fresh water zones from a wellbore which carries fracturing fluids. Steel pipe casing, cement, labor and equipment are part of the cost of complying with state regulations to protect fresh water from the hydraulic fracturing process.

In certain scenarios, additional permit authorization from river basins, underground water commissions, and municipalities are necessary prior to hydraulically fracturing a well. The process of developing permit applications and the fees associated with them are part of the cost of hydraulic fracturing.

Once a fracturing job is done, the process of disposing of the fluids – mostly water – is heavily regulated. Hauling the fluids to a permitted disposal site and paying the disposal facility to accept the fluids contribute to the regulatory cost of hydraulic fracturing.

Honorable Diana DeGette March 5, 2010 Page 2

As one would expect, these and other variables result in a multitude of costs depending on the location and nature of the well. We estimate compliance costs of regulations related to hydraulic fracturing have averaged \$400,000 per well. Given that XTO Energy drilled and hydraulically fractured 1,058 wells in 2009, it is reasonable to conclude our cost to comply with statutes and regulations related to hydraulic fracturing exceeded \$400 million.

I appreciate the opportunity to respond to your question and ask that you let me know if I can be of further assistance.

Sincerely,

Bob R. Simpson // Chairman & Founder

cc: Chairman Henry Waxman, Committee on Energy & Commerce
Congressman Joe Barton, Ranking Member, Committee on Energy & Commerce
Chairman Ed Markey, Subcommittee on Energy & Environment
Congressman Fred Upton, Ranking Member, Subcommittee on Energy &
Environment



Bob R. Simpson Chairman of the Board and Founder

March 5, 2010

Honorable Gene Green United States House of Representatives 2372 Rayburn House Office Building Washington, D.C. 20515

Dear Congressman Green:

Recently, Chairman Henry Waxman of the House Committee on Energy & Commerce forwarded to me four questions you submitted as a follow-up to my appearance before the House Subcomittee on Energy & Environment. My testimony was part of the hearing, "The ExxonMobil – XTO Merger: Impacts on U.S. Energy Markets." I appreciate your interest and hope the attached responses are helpful.

I appreciate the opportunity to respond to your questions and ask that you let me know if I can be of further assistance.

Sincerely,

Chairman & Founder

cc: Chairman Henry Waxman, Committee on Energy & Commerce
Congressman Joe Barton, Ranking Member, Committee on Energy & Commerce
Chairman Ed Markey, Subcommittee on Energy & Environment
Congressman Fred Upton, Ranking Member, Subcommittee on Energy &
Environment

Honorable Gene Green March 5, 2010 Page 2

1. "Mr. Simpson, as you know, gas producers have traditionally had to search for new gas supplies each year, which made long-term contracts between producers and consumers impractical.

What impact will U.S. shale discoveries have on the ability for natural gas producers to enter into long-term contracts with consumers such as utilities, and how will these contracts impact natural gas prices?"

The dramatic increase in proven U.S. natural gas reserves is a paradigm shift in the U.S. energy landscape. Increased confidence in abundant supply will undoubtedly serve to make natural gas more attractive as both a feedstock and a burner tip fuel. It is not clear whether this will result in an increase in the use of long term contracts to mitigate price and supply risk. As risk management practices have improved, the use of hedging has become a far more commonplace tool in natural gas markets. While increased supply may lead some to seek longer term contracts, we do not anticipate the use of such contracts will have a meaningful impact on natural gas prices.

2. "XTO's website partially attributes its financial performance to its quote: 'significant oil and gas hedges through 2010 with nearly 55% of production hedged at \$9.62 on an equivalent basis.' Recently, Congress approved legislation that sought to bring greater transparency to derivatives markets that included an exemption permitting energy end-users to continue to engage in over-the-counter transactions to legitimately hedge risk for their businesses.

As an energy end-user, how important is this ability to hedge risk for your business operations and what would happen if Congress intentionally (or unintentionally) restricted your company's ability to hedge risk?"

Allowing commodity producers to protect themselves against price risk through hedging is an important function of the derivatives market. While we understand and support the Congress's effort to enact responsible market reforms, it is important to be mindful of the effect these changes may have on commodity producers who utilize the market to manage price risk with customized hedges. At XTO, our ability to plan and budget for future exploration and production activities has historically relied on these financial tools to manage the significant commodity price risk associated with oil and natural gas production.

We applaud the effort to create an exception for those of us who are not swap dealers or major swap participants, but who instead, have been using swaps to effectively hedge against adverse price movements in the product we produce. Excluding us from cash margin collateral requirements and from mandatory central clearing and trading proposals recognizes our role in the market for what we are – and more importantly, for what we are not.

At XTO Energy, we have effectively utilized hedging practices to stabilize our cash flow to facilitate a long term capital outlay and drilling program. Over the past decade, our production has grown 714% and our full time workforce has grown to 3,300. Our hedging strategy has been a key component of our growth and success.

Honorable Gene Green March 5, 2010 Page 3

3. "In your testimony, you discuss the new upstream organization that will be created to manage global development and production of unconventional resources to be based at XTO's current offices in Ft. Worth, Texas.

Do you expect most of XTO's current employees to remain employed at this new upstream organization, and how many additional jobs do you estimate could be created at the facility?"

It is our expectation that most of XTO's current employees will remain employed at the new upstream organization within ExxonMobil. Additional job creation is difficult to estimate, but given our expectation of increased operational and production opportunities resulting from the merger, we believe there is potential to create additional positions as we increase our focus on development of unconventional oil and natural gas resources, and depending on the pace of development in response to market demands for natural gas.

4. "One analyst noted that the Exxon Mobil-XTO merger would bring together very different business models: the smaller player that must constantly drill and reinvest for the short-term business play; and the larger player that focuses instead on long-term, efficient assets.

Another analyst noted that it may be difficult for Exxon to retain XTO's talented workforce due to Exxon's larger, more bureaucratic organization.

How would you respond to these observations, and how will you integrate both the business models and workforces of Exxon Mobil and XTO for a successful merger?"

This proposed merger will enable XTO to apply its technical expertise and operational excellence to a greater number of unconventional natural gas opportunities using added scale, technology, and financial capacity. The current companies differ in structure and focus, but the combined and complementary strengths of each company will create a unique entity that will be able to extend and increase its shale play development activities.

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